Wednesday January 7, 2004

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 1/06): 58,715 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C:	$44.4 -50.1 per MWh, Ave. = $46.2
• Approximate change from previous week	$+6.8 per MWh
• "Normal" price range, before 5/00	$20-$40 per MWh
• Petroleum, West Texas Intermediate:	$33.62 per barrel (year ago: $27.10)
• Seattle gasoline price (12/30)	$1.54 per gallon (year ago $1.39),
• Natural gas, Sumas Hub:	$5.90 per million British Thermal Units (year ago $4.07)
• Approximate change from last week.	Oil: +1.22 $ per barrel; Nat. gas: +0.28 $ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
  - A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
  - A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
  - Most recent rotating blackouts: Tuesday, May 8, 2001

- Energy News Headlines from the Nation
  - BPA completes power line into Washington's Puget Sound (Reuters, 1/06)
  - Western Electricity Coordinating Council: 2003-04 Winter Assessment (Part of executive summary)

4. River and Snowpack Information (Updated Dec. 16, 2003)

- Observed October stream flow at The Dalles: 109.3% of average
- Observed November precipitation above The Dalles: 109% of average
- Federal hydropower generation: November 6,823 aMW

5. Energy Conservation Achievement (Updated Nov. 12, 2003)

- **State Agencies:** From July thru Sept. 2003 electrical usage was 8.9 % less and natural gas usage was 2.3% more compared to the same period in 2000.

6. Power Exchanged: (Jan 6, 2004)

- Average flow of power during the last 30 days

o California (exported to)	1,926 MW
o Canada (imported from)	364 MW
o Net power export:	1,562 MW

BPA completes power line into Wash.'s Puget Sound

NEW YORK, Jan 6 (Reuters)

Bonneville Power Administration finished a needed $40 million power line in Washington state's fast growing Puget Sound just in time to meet record high demand, the federal power distributor said in a statement.

"After years of planning and a tight construction schedule this fall, the Kangley-Echo Lake line went into full operation on Dec. 31," Vickie VanZandt, BPA's chief engineer, said in the statement late on Monday.

"We got it into service just in time to meet record-high loads driven by the current arctic cold front."

The growth in the Puget Sound area has increased demand on the transmission system and necessitated upgrades.

The Kangley-Echo Lake line stretches nine miles through the Cedar River Watershed, connecting the generating plants east of the Cascades to Seattle and the city's northern suburbs.

BPA markets electricity from 31 federally owned dams, one nuclear plant and a large wind energy program to Pacific Northwest utilities.

The Northwest Power Pool, which oversees the region's power system, reported peak usage of more than 54,700 megawatts at 5 a.m. this morning.

One megawatt provides enough energy for about 1,000 average homes.

Forecasters expect continued record energy consumption as population centers east of the Cascades absorb the full brunt of the arctic weather, BPA said.

"We don't expect any trouble meeting loads from a generating standpoint," VanZandt said. "But in weather like this, having a strong delivery system is equally important."

This power line represents BPA's latest investment in the power delivery system into the Puget Sound region.

Over the past two years, BPA said it has spent $98 million, including this project, to strengthen the transmission grid serving Puget Sound.

Western Electricity Coordinating Council: 2003-2004 Winter Assessment

Projected Internal Demand 120,385 MW
Interruptible Demand & DSM 1,814 MW
Projected Net Internal Demand 118,571 MW
Last Winter's Peak Demand 114,918 MW
Change 4.8 %
All-Time Winter Peak Demand 120,122 MW
Net Operable Capacity 176,206 MW
Projected Purchases 567 MW
Projected Sales 120 MW
Adj. To Sales & Purchases —
Net Capacity Resources 176,653 MW
Capacity Margin 32.9 %
Reserve Margin 49.0 %

Demand
The aggregate 2003-2004 WECC winter total internal demand is forecast to be 120,385 MW (U.S. systems 100,179 MW, Canadian systems 18,899 MW, and Mexican system 1,307 MW). The forecast is based on average weather conditions, and is 4.8% above last winter's actual peak demand, which was established under generally normal to above normal temperatures in the Region.

Resources
For the peak winter month of December, WECC's capacity margin is expected to be 32.9%. However, WECC is a large geographical region. If multiple areas peak simultaneously, portions of the Region may need to take action to reduce electricity consumption and ensure that adequate operating reserves are maintained.

Fuel supplies are expected to be adequate in all areas of the Region under normal winter weather conditions. The hydroelectric resource capability has been reduced by about 2,160 MW in the Northwest Power Pool subregion due largely to biological opinion requirements resulting from the Endangered Species Act. In the California-Mexico subregion, the hydroelectric resource capability has been reduced by 3,000 MW based on hydro capacity experience with runoff conditions and irrigation requirements. Hydroelectric capability for the other WECC subregions is about the same as the generating capability under median hydro conditions.

Transmission
WECC conducts extensive operating studies that model the transmission system under a number of load and resource scenarios and develops operating procedures to maintain safe and reliable operations. The transmission system is considered adequate for all projected firm transactions and most economy energy transfers.

Northwest Power Pool (NWPP) Area
NWPP is a winter peaking area. The 2003-2004 winter peak demand forecast of 54,000 MW for the combined Northwest United States and Canadian areas is 6.6% above last winter's actual peak

demand of 50,644 MW. The winter peak demand forecast includes 237 MW of load management and interruptible demand. The projected capacity margin for one hour for the peak month is 31.1%. Analyses indicate the Northwest region will be able to meet firm loads and operating reserve requirements for the 2003-2004 winter operations, assuming normal weather conditions.

The NWPP is comprised of all or major portions of the states of Idaho; Montana; Nevada; Oregon; Utah; Washington; and Wyoming; a small portion of Northern California; and, the Canadian provinces of Alberta and British Columbia. Analyses indicate the Northwest region will be able to meet firm loads and operating reserve requirements for the 2003-2004winter operations, assuming normal weather conditions. Past analyses of temperature and load relationships indicate that the peak demand of the NWPP will increase by approximately 300 MW per degree below normal. Experience indicates that a "cold snap," when daily temperatures average 19 to 22 degrees below normal, increases the peak demand by approximately 6,000 MW. New transmission facilities that will be available for the winter period include the Kangley-Echo Lake 500 kV line, a nine-mile extension of the Schultz-Raver #2 500 kV line, being built to serve growth in the Seattle area. Two new series capacitors are being installed at the Schultz substation to prevent voltage instability in the Puget Sound area, and additional 230/500 kV transformers are being installed at the Pearl and SnoKing substations. Constrained transmission paths within the NWPP area have been identified, operating studies modeling these constraints have been performed and operating procedures have been developed to ensure safe and reliable operations.

Note that Tuesday's NWPP peak load of 58,715 MW significantly exceeded the peak load in the WECC report of 54,000 MW. However, reserve margins were still adequate.

Wednesday January 14, 2004

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 1/13): 50,499 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C:	$44 -62 per MWh, Ave. = $50.2
• Approximate change from previous week	$+4 per MWh
• "Normal" price range, before 5/00	$20-$40 per MWh
• Petroleum, West Texas Intermediate:	$34.85 per barrel (year ago: $27.10)
• Seattle gasoline price (1/12)	$1.60 per gallon (year ago $1.37),
• Natural gas, Sumas Hub:	$6.05 per million British Thermal Units (year ago $4.67)
• Approximate change from last week.	Oil: +1.23 $ per barrel; Nat. gas: +0.23 $ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
  - A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
  - A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
  - Most recent rotating blackouts: Tuesday, May 8, 2001

- Energy News Headlines from the Nation
  - Bioenergy untapped resource, study says (Seattle PI, 1/13)
  - Puget Sound Energy files 500 million mixed shelf offering (reuters, Jan 9)
  - Scientist predict widespread extinction from global warming (NYT, Jan. 8)
  - Western Electricity Coordinating Council: 2003-04 Winter Assessment (Extraction from the executive summary)

4. River and Snowpack Information (Updated Jan. 13, 2003)

- Observed December stream flow at The Dalles: 97% of average
- Observed November precipitation above The Dalles: 109% of average
- Federal hydropower generation: November 6,823 aMW

5. Energy Conservation Achievement (Updated Nov. 12, 2003)

- **State Agencies:** From July thru Sept. 2003 electrical usage was 8.9 % less and natural gas usage was 2.3% more compared to the same period in 2000.

6. Power Exchanged: (Jan 12, 2004)

- Average flow of power during the last 30 days
  - California (exported to) 1,670 MW
  - Canada (imported from) 391 MW
  - Net power export: 1,279 MW

Bioenergy an untapped resource, study says

Seattle PI, Jan 13, 2003

The state could use biological energy sources to power four out of every 10 homes in Eastern Washington, said a study commissioned by the state Department of Ecology.

The availability of vast amounts of such sources, mostly in the form of agricultural waste such as wheat straw and manure, could position the region to be a major player in the development of bioenergy, according to the study conducted by Washington State University's Department of Biological Systems Engineering.

Huge questions remain regarding electrical transmission of such energy and transportation of wastes to generators, but some hope the study will help spur further development.

"We'll probably never even approach what this potential is," said Mark Fuchs, a biosolids coordinator with the Department of Ecology. "But there are localized opportunities. There's a lot of resource out there."

Organizers hope to get funding for a second phase of the study.

Puget Energy files $500 million mixed shelf offering

Jan 9 (Reuters)

Utility Puget Energy filed with U.S. regulators on Friday to sell over time up to $500 million in common stock and senior notes. The Washington state utility said it would use proceeds for general corporate purposes including capital expenditures, investments in subsidiaries, working

Capital and debt repayment, according to the Securities and Exchange Commission filing. A shelf registration gives a company advance regulatory approval to sell securities in one or more separate offerings in amounts, at prices and on terms to be determined at the time of the sale.

Scientists Predict Widespread Extinction by Global Warming

By JAMES GORMAN

NYT, January 8, 2004

An international group of 19 scientists, analyzing research around the globe, has concluded that a warming climate will rival habitat destruction in prompting widespread extinctions in this century.

By 2050, the scientists say, if current warming trends continue, 15 to 37 percent of the 1,103 species they studied will be doomed.

They did not extend their prediction to all species worldwide, but they said that the sample was large enough to show that climate change could be disastrous. In addition to current efforts to create parks and reserves, they added, efforts to decrease global warming will be necessary to reduce rates of extinction.

The analysis is built on layers of computer models of climate change and other models of the ways species become extinct, each having varying degrees of uncertainty. Consequently, the authors say, the numbers cannot be taken as precise. They are described in the paper as a "first pass" at quantifying the extinction threat posed by a global warming trend.

"There's a huge amount of uncertainty," said the primary author of the paper, Dr. Chris D. Thomas, a professor of conservation biology at the University of Leeds in England.

Dr. Daniel B. Botkin, professor emeritus at the University of California at Santa Barbara, an ecologist who has done extensive research on climate change, said the paper was "a valiant effort" to address the effect of warming trends on living things, an area of research he said had been slighted in favor of creating climate models. And he acknowledged that the authors themselves presented their numbers as a beginning and a spur to further research.

He said, however, that the analysis was based on "a lot of steady state assumptions that lead it to the most pessimistic forecast," including the notion that things will stay as they are in terms of the ways animals migrate and respond to temperature change.

Scientists have been predicting drastic extinctions for years, largely because humans are steadily taking land that other creatures live on and turning it to their own purposes.

By different estimates species are now becoming extinct at rates 100 to 1,000 times as great as would be expected without human interference or a catastrophic event.

The analysis, published Wednesday in the journal Nature, raises the status of global warming from that of contributor to habitat loss to full-fledged force for extinction.

Dr. Thomas said that despite the significant uncertainties, the researchers assessed the raw data on species numbers, current habitats and past extinctions from as many angles as possible. They included species in different terrestrial environments around the world — in Central America, South America, Australia and Africa.

They used predictions of increased temperature ranging from mild to extreme and applied three different methods for predicting extinction, all based on the relationship of species disappearance to loss of livable habitat. They also considered two different possibilities for gauging how well the different species would be able to disperse as temperatures at home became uncomfortable.

Although the results vary widely, Dr. Thomas said, even the most conservative estimates show that global warming, which he and most other scientists attribute to emissions of carbon dioxide and other greenhouse gases in the burning of fossil fuels, presents a "very serious risk to huge numbers of species and at least ranks alongside habitat destruction" as a threat.

The paper does not predict that all the extinctions will occur by 2050, but that by that time these species will have reached the point of no return.

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Wednesday January 21, 2004

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 1/21): 49,815 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C:	$40-50 per MWh, Ave. = $43.6
• Approximate change from previous week	$-6.6 per MWh
• "Normal" price range, before 5/00	$20-$40 per MWh
• Petroleum, West Texas Intermediate:	$35.78 per barrel (year ago: $27.10)
• Seattle gasoline price (1/20)	$1.67 per gallon (year ago $1.37),
• Natural gas, Sumas Hub:	$5.25 per million British Thermal Units (year ago $4.67)
• Approximate change from last week.	Oil: +0.93 $ per barrel; Nat. gas: -0.80 $ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
  - A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
  - A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
  - Most recent rotating blackouts: Tuesday, May 8, 2001

- Energy News Headlines from the Nation
  - California facing power plant shortage (San Jose Mercury News, 1/19)
  - Pipeline shutdown needed for public safety (Bellingham Herald, Jan 18)
  - Energy rates face uncertain future (Spokesman Review, Jan. 18)

4. River and Snowpack Information (Updated Jan. 20, 2004)

- Observed December stream flow at The Dalles: 74% of average
- Observed December precipitation above The Dalles: 97% of average
- Federal hydropower generation in December: 8,317 aMW

5. Energy Conservation Achievement (Updated Nov. 12, 2003)

- **State Agencies:** From July thru Sept. 2003 electrical usage was 8.9 % less and natural gas usage was 2.3% more compared to the same period in 2000.

6. Power Exchanged: (Jan 20, 2004)

- Average flow of power during the last 30 days

o California (exported to)	1,468 MW
o Canada (imported from)	364 MW
o Net power export:	1,104 MW

California Facing Power Plant Shortage

San Jose Mercury News, Calif. - January 19, 2003

Just days after Arnold Schwarzenegger was elected governor last year, state energy officials approved a request by Valero Refinery to delay completion of a 102-megawatt power plant in Benicia.

The plant was to be small, generating enough power for about 75,000 homes. But the delay is representative of a much larger problem facing California.

If California does not begin to build more new power plants -- and soon -- it could face an energy crisis not unlike the one that led to blackouts in 2000 and 2001.

Aside from the state's money woes, the looming energy problem may be the biggest challenge facing the new governor.

"I think the political reality is that nothing will happen until after the budget is resolved," said Severin Borenstein, director of the University of California-Berkeley Energy Institute. "But after that, I hope it's front and center."

California's energy picture is far more stable than it was just two or three years ago. Since 2001, more than 9,500 megawatts of generating capacity -- about a fifth the amount used during peak summer periods -- have been added to the state's energy grid. The state has not faced a serious blackout threat since May 2001.

But even with a slow economy, electricity demand is growing at about 1.5 percent a year. At the same time, anywhere from 4,000 to 10,000 megawatts of power could disappear in the next few years as aging plants are retired.

Meanwhile, power generators have stalled or abandoned construction on many power plants.

As of this month, 12 power plants slated to produce about nearly 5,000 megawatts of power had been approved by the California Energy Commission but were not under construction. Most are designated as "on-hold" or "canceled." Another seven are being built, but their start dates have been delayed, including Calpine's Metcalf plant in San Jose.

Commission officials are predicting the state should have "adequate" energy supplies through 2009. But extreme weather could dramatically drive up demand, creating shortages as early as 2006.

"We have no major power plants coming on line in the next year, and we may not have any coming on line in 2005," said William Keese, chairman of the energy commission. "We categorically need more power plants."

Companies have cited myriad reasons for the slowdown in plant-building. Most point to the political and regulatory turmoil that seems to perpetually hang over energy issues in California. Others are waiting for regulators to adopt new power-buying rules for the state's largest utilities.

Resolving these issues is crucial because energy producers need to know who will be buying their power, companies say. Without such assurances, they cannot get financing from banks to build power plants.

"If there were rules like these that were clear, over the next four or five years, people would be building plants," said Jan Smutny-Jones, executive director of the Independent Energy Producers, a trade association for energy sellers.

In the Valero case, company officials concluded the state's energy regulations and policies raised too many questions for them to invest tens of millions of dollars in a new plant.

"We couldn't tell what the game was we'd be playing," said Scott Folwarkow, director of government affairs for the Benicia company. "I think there's a lot of caution in the market because of what everyone went through" during the energy crisis.

Before energy deregulation, utilities such as Pacific Gas and Electric produced most, if not all, of their own power. Today, utilities buy most of their power on the wholesale market. Some wholesalers are worried the utilities are trying to worm their way back into the power-producing business.

Last month, the state Public Utilities Commission gave permission for Edison International to buy Mountainview, a half-finished power plant east of Los Angeles. Edison then got permission to sell power from the plant back to its utility -- Southern California Edison -- bypassing the competitive energy market.

"There seems to be some undercurrent that maybe we should get the utilities back in the business, and there's no discussion on that," Smutny-Jones said.

Energy producers are also eyeing another key PUC vote due later this month. That decision will set the rules for how utilities should acquire power over the next several years, including how much of an electricity reserve they will need to keep on hand.

Sellers want the PUC to order a 15 percent reserve -- up from the current 7 percent -- which would require the utilities to buy more power.

Also unclear is whether large energy users -- such as supermarkets and manufacturing plants -- will regain the right to buy power on the open market, instead of being required to buy from their local utilities. Under orders from the Legislature, the PUC shut the door on that option in 2001. But Schwarzenegger has said he favors bringing back that type of choice, and some observers are predicting the Legislature will go along.

Calpine of San Jose is one of the few companies that has been less tentative about the market. Although some projects are on hold while it seeks financing, the company says it has big plans for its home state. Company officials see electricity demand growing and a void in supply that they are eager to fill.

"We see what's going to happen in the future, and we want to be part of it," said Calpine spokesman Bill Highlander. "We've already invested $2 billion in California and we have plans to spend another $2 billion."

Schwarzenegger has not said much about his energy views since taking office. But in a policy brief released in October, he said he generally favors deregulation, larger power reserves, giving large power users the option to shop around, and an increase in the use of renewable power, which comes from solar, geothermal and wind sources. Administration officials said last week they were not yet ready to go into more detail.

Keese, of the energy commission, said he is confident Schwarzenegger will unveil a more detailed plan to guide the state's energy future.

"I would imagine that in the next two or three months, you will see a plan that will be good for California," he said.

Until then, many energy producers will probably stay on the sidelines.

"It's a matter of letting the dust settle," Folwarkow said.

Pipeline shutdown needed for public safety

SAFETY: Williams Northwest Pipeline Corp.'s natural gas line should have a complete examination.

Bellingham Herald, Jan. 18

The recent shutdown of a break-prone, 268-mile-long natural gas line that runs through Whatcom County was a necessary move to protect people and property.

Federal regulators should keep the 47-year-old pipeline idled until Williams Northwest Pipeline Corp. has thoroughly checked for weak spots, replaced the faulty pipe and demonstrated conclusively that the line can be operated safely.

Williams shut down the line Dec. 17 following ruptures in May near Auburn and Dec. 13 near Toledo in Lewis County - one day before the federal Office of Pipeline Safety ordered the line idled.

The Auburn break blew a crater in the ground; the Toledo break spewed gas into the ground for three hours. A 1997 break in the same line near Everson caused an explosion that shattered windows, damaged homes and sparked a torchlike blaze.

Fortunately, no one was hurt in any of those incidents.

But the ongoing breaks that the company blames on "soil acidity, moisture, operating conditions, age and the type of coating" on the pipe indicate serious problems that, if not corrected, have the potential to cause injuries and loss of life.

Bellingham and Whatcom County residents know those dangers all too well.

The June 1999 rupture and explosion of the Olympic fuel pipeline dumped more than 276,000 gallons of liquid gasoline into Whatcom and Hannah creeks and led to the deaths of three youths.

The Williams pipeline rupture near Toledo Dec. 13 was particularly alarming because Williams had reduced pressure to 80 percent of full pressure as a result of the May break. As a senior pipeline engineer for the state Utilities and Transportation Commission noted "never (has) a pipeline (had) another incident after the pressure has been reduced."

Given the questionable integrity of the line, federal regulators wisely are ordering Williams to replace the line in densely populated areas, including Bellingham, in three years and in rural areas over the next 10 years.

They also are rightly requiring Williams to inspect its other two major transmission lines, one of which parallels the one that was shut down.

Company officials say that second line, which is capable of meeting consumers' demand for natural gas, is about 20 years newer than the idled line and hasn't displayed the same corrosion problems.

That's good news, but Whatcom County and other Western Washington residents deserve to have that assurance backed up by precise testing.

The Bellingham pipeline blast helped bolster public awareness of the dangers of pipelines and also the need for stricter pipeline safety laws, oversight and enforcement.

Williams voluntary idling of its natural-gas line and the Office of Pipeline Safety's shutdown order appear to be evidence that those measures and efforts are paying off.

Energy rates face uncertain future

Likely demise of BPA rate cut could have long-term implications,
Spokane Spokesman Review, Jan. 18

On Wednesday, time runs out for a proposed settlement of litigation involving most Northwest utilities and, so, most Northwest electricity consumers.

Barring some 11th-hour changes of heart, the deal will die, and with it an immediate 10 percent rate cut by the Bonneville Power Administration.

That's bad, but there are other serious implications as well.

Settlement opponents say the rate cut is a trick that merely postpones some charges that consumers will have to make up after 2006. It also buys off public utilities that have challenged a Bonneville agreement with private utilities who will receive $269 million of agency funds in lieu of power allotted to them under the Northwest Power Act.

About $10 million of that money benefits the residential and small-farm customers of Avista Utilities. The settlement would reduce that amount by $3.5 million, which would be recovered, with interest, after 2006.

More galling to settlement foes is a $200 million "risk contingency" intended to protect two private utilities -- Puget Sound Power and PacifiCorp -- in case a lawsuit was filed.

If the deal is accepted by the dozens of utilities, regulators and industrial customers involved, that $200 million poison bill goes away, which would help make that rate cut possible.

That's probably not going to happen.

Any deal that required the unanimous consent of all parties was fragile at best. Its only chance was peer pressure from utility managers anxious to put as much as the dreary recent past to rest and more on to the challenges ahead. But dissenters, led by the Snohomish County Public Utility District, dug in early. Most other utilities have not bothered to act because there seems to be next to no hope the settlement will go anywhere anyway.

Snohomish officials met Thursday with Washington Gov. Gary Locke, a deal supporter. No minds were changed.

The Northwest has been a long time coming to this juncture.

Relations between Bonneville and the public utilities that buy most of its power began to deteriorate during the Washington Public Power Supply System nuclear plant fiasco of the late 1970s. Passage of the Northwest Power Act, which compromised the public utilities' grip on Bonneville's electricity, added to the tension. The double-digit rate increases caused by the 2000-2001 energy crisis were the last shock.

The settlement was supposed to clear away some of the wreckage caused by the crisis. Bonneville, for example, is committed to deliver 11,000 megawatts of electricity, but can generate only 8,000 megawatts. Buying that extra energy had a lot to do with a 40 percent-plus jump in its rates.

By October 2006, the region must decide who will get Bonneville's hydroelectricity over the next five years. The Northwest needs more power, more conservation, and more transmission infrastructure. Who will build it? What measures will best enhance fish and wildlife resources? And how can all this be accomplished at minimal cost to homeowners and business women and men who can remember a time when cheap Northwest electricity was the envy of the nation?

Time may not be short, but it cannot be squandered. Eight months went into formulating the settlement on the table now. Not only would renewed litigation consume time, money and intellectual capital best put to work on the Northwest's energy future, Bonneville has an impressive record of court victories.

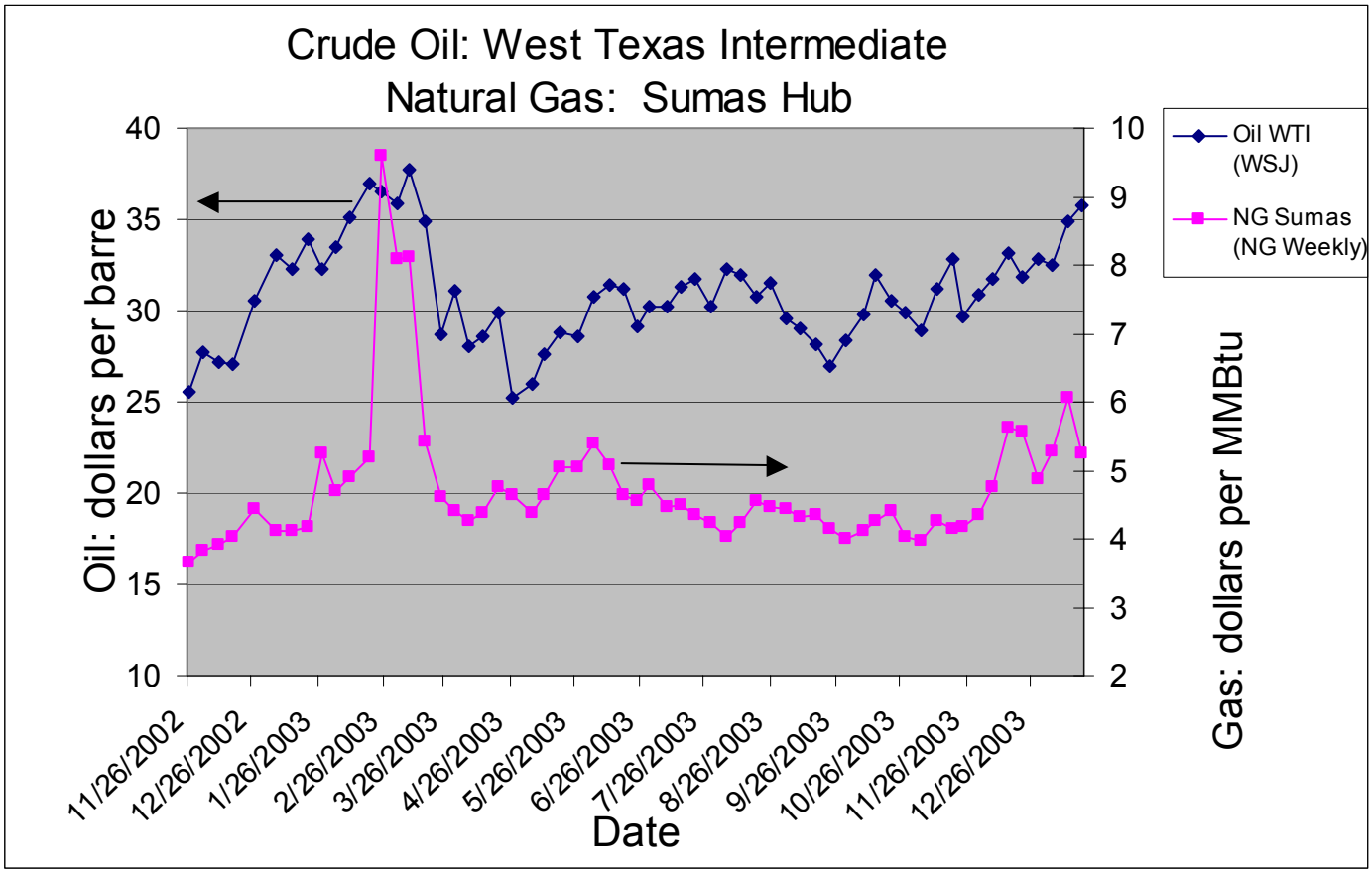
As Locke energy adviser Dave Danner put it: "If not this settlement, what?"

Modifications have been discussed, but the architects do not want details released until Wednesday's deadline for the existing deal expires. The work could be done quickly if most of the original terms are preserved.

The Northwest is not working in a vacuum. Officials at the Federal Energy Regulatory Commission think they have a better way to run not only this region's electricity grid, but those of the whole nation. Better we should solve our problems internally.

Wednesday January 21, 2004

Petroleum and natural gas prices have increased significantly over the past 6 to 8 weeks.



Wednesday January 28, 2004

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 1/28): 50,491 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C:	$42-48 per MWh, Ave. = $43.3
• Approximate change from previous week	$-0.3 per MWh
• "Normal" price range, before 5/00	$20-$40 per MWh
• Petroleum, West Texas Intermediate:	$34.48 per barrel (year ago: $27.10)
• Seattle gasoline price (1/26)	$1.70 per gallon (year ago $1.46),
• Natural gas, Sumas Hub:	$5.45 per million British Thermal Units (year ago $4.67)
• Approximate change from last week.	Oil: -1.30 $ per barrel; Nat. gas: +0.20 $ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
  - A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
  - A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
  - Most recent rotating blackouts: Tuesday, May 8, 2001

- Energy News Headlines from the Nation
  - Long Beach gas plant could be boon, or curse (LA Times, Jan. 27)
  - Specter of power blackouts haunts regulation debate (Sac Bee, Jan 26)
  - Several utilities reject BPA accord (Seattle PI, Jan 21)

4. River and Snowpack Information (Updated Jan. 27, 2004)

- Observed December stream flow at The Dalles: 74% of average
- Observed December precipitation above The Dalles: 98% of average
- Observed snow pack, early January: 97% of average
- Federal hydropower generation in December: 8,317 aMW

5. Energy Conservation Achievement (Updated Nov. 12, 2003)

- **State Agencies:** From July thru Sept. 2003 electrical usage was 8.9 % less and natural gas usage was 2.3% more compared to the same period in 2000.

6. Power Exchanged: (Jan 20, 2004)

- Average flow of power during the last 30 days

o California (exported to)	1,468 MW
o Canada (imported from)	364 MW
o Net power export:	1,104 MW

Long Beach Gas Plant Could Be Boon, Curse

By Deborah Schoch, LA Times Staff Writer, Jan 27

To its supporters, the energy terminal planned for the Long Beach seaport would provide not only a reliable supply of liquefied natural gas, but relief for residents breathing some of the most unhealthful air in the country.

Yet the promise of cleaner air pales for some in the face of predictions that a worst-case liquefied natural gas accident could send highly flammable fumes spewing into downtown Long Beach and nearby neighborhoods.

A Mitsubishi Corp. subsidiary on Monday applied for federal and state permission to build the $400-million import facility, launching a formal review that the company hopes could allow construction to start in a year.

If local, state and federal approvals are secured, the first tanker carrying LNG, a highly chilled and condensed form of natural gas, could sail into San Pedro Bay by early 2008.Whether the West Coast's first LNG terminal would be a boon or a curse — or both — poses one of the most tangled energy questions to emerge in the Los Angeles region. Vehicles that burn cancer-causing diesel fuel could be replaced with those burning cleaner LNG, air quality experts say, and one of the area's biggest air pollution threats could be reduced.

Only four LNG terminals operate in the United States today, but a burst of interest in the moneymaking potential of LNG imports has touched off plans for 31 plants from Long Beach to Maine.

Although the LNG industry has what experts call a relatively safe record, some plans are creating a stir.

The governor of Alabama vowed this month to block an LNG terminal planned for Mobile Bay unless an independent study proves that it would be safe. The Bay Area city of Vallejo helped defeat an LNG plant a year ago when a study raised significant safety concerns.

Residents of tiny Harpswell, Maine, will vote March 9 on whether to allow an LNG terminal on their coast. And in the wake of the Sept. 11 terrorist attacks, Boston Mayor Thomas M. Menino has attempted to block LNG tankers from moving through Boston Harbor to reach one of the nation's oldest LNG terminals in nearby Everett.

Just last week, an explosion at an Algerian LNG plant killed at least 27 people and injured 74 others. That plant performs a different purpose — it chills natural gas into a liquid, while plants here turn it into a gaseous form again — but U.S. officials are investigating the accident to make sure similar problems will not occur here.

Staunch Support

Proponents of the Long Beach project say that they are unfazed by opposition in other cities or by local criticism raised in recent weeks.

"This is going to be the safest LNG receiving terminal in the world," said Tom Giles, head of Sound Energy Solutions, the Mitsubishi subsidiary. In an interview last week, he and James P. Lewis, an LNG safety expert working for the subsidiary, described plans for shielding massive LNG storage tanks with double walls — one built of concrete and the other of nickel-reinforced metal — to ensure that no gas can escape.

What makes LNG most attractive to importers is that it packs well.

Natural gas is chilled at minus 260 degrees, turning it into a clear, odorless liquid that takes up a tiny faction of the space of gas. When warmed and returned to gaseous form, it is used just like natural gas transported in pipes for warming homes, cooking meals and drying clothes.

"It's wonderful. We need the gas," said Ronald Koopman, a retired scientist from Lawrence Livermore National Laboratory who spent 11 years testing LNG safety.

But Koopman also warned that a terminal should not be located within two or three miles of a populated area. In Long Beach, such tourist meccas as the Queen Mary and the Aquarium of the Pacific are less than two miles downwind from the proposed site. So is the Long Beach Convention Center and an ambitious new restaurant and theater complex known as the Pike.

The Long Beach proposal is the furthest along of four LNG import plants proposed for California, and the only one in a highly populated area. A proposal for Humboldt Bay in Eureka is roiling some residents. Two offshore plants proposed along the Ventura County coast would convert the LNG back to gas form and ship it to the mainland via pipelines.

The LNG proposal for Long Beach illustrates the economic and social crossroads reached by the city, which suffered mightily in the early 1990s when the U.S. Navy left town and the aerospace industry fizzled.

The city's downtown is trying to remake itself with the Pike, posh restaurants along Pine Street and 3,000 to 4,000 downtown residential units for upscale clientele. At the same time, the mushrooming port complex has produced new jobs — albeit with increased air pollution and truck traffic.

It may also provide cheaper gas prices to city residents and small businesses, who buy their gas from the city-owned gas company, Long Beach Energy. The city is negotiating with Mitsubishi in hopes of ensuring discounted gas.

Industry Precautions

Industry experts note that although the United States has a short history of importing LNG because domestic supplies were plentiful and cheap, other countries have imported LNG for decades. Key to that success, industry officials say, are myriad protections built into LNG transportation and

handling, from double-hulled tankers to onshore storage tanks built with thick, protective walls.

The surge of national interest in LNG stems from rising demand — and rising prices — for natural gas and a paucity of new supplies in the U.S. and Canada. The gas industry is looking overseas at the Pacific Rim, the Middle East and Africa, which now export LNG to Europe and Asia.

Mitsubishi, for instance, handles half of Japan's natural gas imports from such countries as Brunei, Malaysia, Australia and Indonesia.

LNG is shipped in double-hulled ships as long as three football fields. The ships typically have a distinctive appearance, with five bulbous white tanks protruding above the hull. Mitsubishi ships would call at Long Beach 70 times a year, about once every five days.

Mammoth container ships and large oil tankers already dock daily at the Los Angeles-Long Beach port complex, the largest in the United States. The terminal would include a tanker berth, the plant, fuel terminal and two 160,000-cubic-meter LNG tanks 170 feet high.

After being transformed back into gaseous form, the LNG would be shipped by pipeline to distribution centers.

In June, Long Beach harbor commissioners gave Mitsubishi the exclusive right to pursue the plan, but will still need to vote on environmental reviews now being drawn up and on a lease for the project.

The Long Beach City Council will not vote directly on the proposal, although some critics say the city has already given tacit approval. In fact, the hard-hitting local news website called LBreport.com has taken the council to task for its speedy decision last year to ask the director of Long Beach Energy to launch talks with Mitsubishi to buy gas from the new plant.

"They have held no conversation with the public about whether putting an LNG facility in our port is a good thing," said Bry Myown, a Long Beach community activist. She complained that officials have not held special meetings to inform citizens. "Nobody knows about it."

The Federal Energy Regulatory Commission, which will oversee the federal environmental review, will conduct at least two public meetings in the Long Beach area, said Mark Robinson, director of the panel's Office of Energy Projects. The Port of Long Beach will oversee the state review, with a number of state agencies weighing in.

Although many hazardous materials already course through the port complex, the size of the LNG proposal and its proximity to downtown Long Beach worry critics.

Some local critics say the Long Beach terminal should be moved offshore, but at the Mitsubishi subsidiary, Giles said an offshore facility could not easily provide the liquefied form of natural gas prized by the port and clean-air activists.

Mayor Beverly O'Neill was traveling and unavailable for an interview, but said in a statement: "The most stringent construction and environmental standards … will be appropriately addressed

before the actual building of any terminal."

Koopman, the LNG safety expert, said the Long Beach project will need to be studied closely because so many people live and work nearby.

"It's a hard argument to make, that hazardous facilities with large amounts of hazardous material be separated from people," Koopman said.

"But it's very logical, and you just wish local governments would have the courage to make that decision."

Monday morning: Specter of power blackouts haunts regulation debate

Officials, looking ahead to 2010, clash on when the state might run short of electricity.
By Carrie Peyton Dahlberg, January 26, 2004

When it comes to forecasts of energy disaster, California has no shortage.

A senator who wants new market rules predicts potential blackouts this summer.

Regulators who recently approved a controversial south state power plant deal said they were acting to avert possible energy shortages in 2006.

Pacific Gas and Electric Co.'s bankruptcy settlement, criticized as far too expensive for consumers, was defended as a way to keep blackouts from darkening California's door.

Ever since a series of blackouts shocked California and bemused much of the rest of the nation in early 2001, preventing outages has become the rallying cry for virtually anything electric that anyone has wanted to build, buy or sell.

Though the blackouts were caused by market manipulation rather than pure shortages, the state is still so spooked that it sometimes seems as if "all we care about is that we have power, damn the cost," said Public Utilities Commission member Loretta Lynch. "The problem is, cost really matters when we have nearly the highest electricity costs in the United States," she said.

Today, the not-for-profit agency that runs much of the electric grid, the Independent System Operator, stands virtually alone among experts in predicting that blackouts could return this summer if enough things go wrong. For that to happen, hot weather or unexpected economic growth would have to push demand for power unusually high as supplies simultaneously were drained by low precipitation, power plant breakdowns or other troubles.

"It's the ISO's job to worry. But by most people's standards we've got a glut of (power) capacity in the West," said Mike Florio, a consumer attorney and ISO board member who dismisses talk of 2004 or '05 blackouts as "Chicken Little."

An internal analysis by the state Public Utilities Commission pokes holes in the ISO forecast, saying it exaggerates potential plant closures and excludes benefits from upcoming power plants outside its jurisdiction.

The ISO acknowledges that plants it lists as mothballed could be called back into service in one to six months. It agrees it is not factoring in municipal utility projects, such as the 500-megawatt

power plant that the Sacramento Municipal Utility District is building, which could ease limits on electricity imports once SMUD starts generating more power locally. The ISO considers those issues irrelevant.

"Bad things happen," said ISO operations engineer Mary Jo Thomas. "We don't look at the probability of it happening; we look at the fact that it's happened in the past. ... We say, what do we have to do to prepare for it?"

The state Energy Commission, which does look at probabilities, predicts that California's energy supplies will be fine through 2010 with average weather. In the kind of heat that occurs about one year out of 10, though, supplies look uncomfortably tight but not necessarily low enough to cause outages in 2006 and a little worse each year after.

The wide range of predictions comes partly because of a basic truth that underlies the state's electricity outlook: As California keeps growing, sooner or later it will need more power. That might happen by 2006. It gets likelier by 2008, and it's virtually certain by 2010, many experts agree.

That is plenty of time to build what's needed, but it is not a lot of time to argue over who should be building and what's going to happen to the remains of California's experiment with electric industry deregulation.

"You can't just wave a magic wand and have a power plant spring out of the ground," said Bob Foster, president of Southern California Edison, the state's second-largest utility. "Whether it's 2006 or 2008 is not all that relevant. If you have a need, you really have to start building now."

That brings California face to face with an issue it repeatedly has mulled but ultimately dodged since late 2001, when the worst of the power crisis waned.

What happens now?

Should the state go back to the days before it experimented with deregulation, when monopoly utilities built power plants and regulators looked over the costs and then set the rates that all customers should be charged?

Should it try to revive all or part of the 1998 industry restructuring under which power generation was freed from regulation, allowing independent companies to build plants and sell electricity to willing buyers?

The issue will be fought out in the Legislature, probably this year or next, according to those most familiar with the debate.

The first volley could well come in March, when utility regulators release their appraisal of a proposed hybrid plan most often described, in an unglamorous shorthand, as "core/non-core."

The concept is that small businesses and residential customers get fully regulated service, with no option to switch suppliers. They become the "core" supplied by their local monopoly utility.

Bigger customers, the businesses that lobbied hard for deregulation in the first place, would get it back. They would be "non-core," and could leave utility service if they found better offers elsewhere.

Gov. Arnold Schwarzenegger has given strong indications that he favors something like core/ non-core, saying he hopes to make markets work and stressing that big and small customers have different needs.

U.S. Sen. Dianne Feinstein, who echoed ISO blackout warnings this month as a way to urge the governor to action, supports the idea. State Assemblyman Keith Richman, R-Northridge, who has written a bill calling for such a split market, wants to revive his push this year.

Consumer groups promise a huge fight, fearing that the concept could shift extra costs onto small customers and also could backfire and actually stifle construction of power plants.

"I really go crazy when they say we need to do this to stimulate new investment," said Florio, an attorney for The Utility Reform Network, or TURN. Based on other markets and past experience in California, he said, larger customers tend to sign shorter contracts and rely more on spot markets. It is regulated utility investment, with its traditional 30-year paybacks, that can better fund power plants, he said.

Still, with regulators, many legislators, big business, power marketers, utilities and the governor all intrigued by a split market, the idea has serious prospects.

Major debate likely will focus on who gets to leave the utility system, under what circumstances they can return, and how to ensure that departing customers don't stick those remaining with an unfair share of costs.

Electricity traders and the biggest power users will lobby for a system that gives them the most flexibility and is open to the greatest number of businesses. Small-consumer representatives and, to some extent, utilities, will push for a larger "core" and a less mobile "non-core" that can't jump into and out of utility service.

Realistically, said Edison's Foster, "I can't be responsible for 85 percent of the customers one month and 30 percent of the customers next month."

There is no way yet to know if a split market will work, said John Geesman, a member of the state Energy Commission. Rules to protect small customers from bearing an unfair share of costs likely also would mean fewer benefits for big customers, he said. With so much interest, though, the state needs to take a hard look at "how to make such a system effective and equitable to all."

Several utilities reject Bonneville rate accord

By WILLIAM MCCALL

Public utilities have rejected an electrical rate decrease proposed by the Bonneville Power Administration and endorsed by four Northwest governors, officials said yesterday.

Bonneville was sued by 72 public utilities after power prices soared during the Western energy crisis of 2001.

The BPA offered to settle the lawsuits by rolling back wholesale electrical prices by 7.4 percent, but all 72 utilities had to sign the agreement by Tuesday in order for it to take effect.

Several Washington state utilities, most notably the Snohomish County Public Utility District, the largest of Bonneville's public customers, were among those that rejected the settlement.

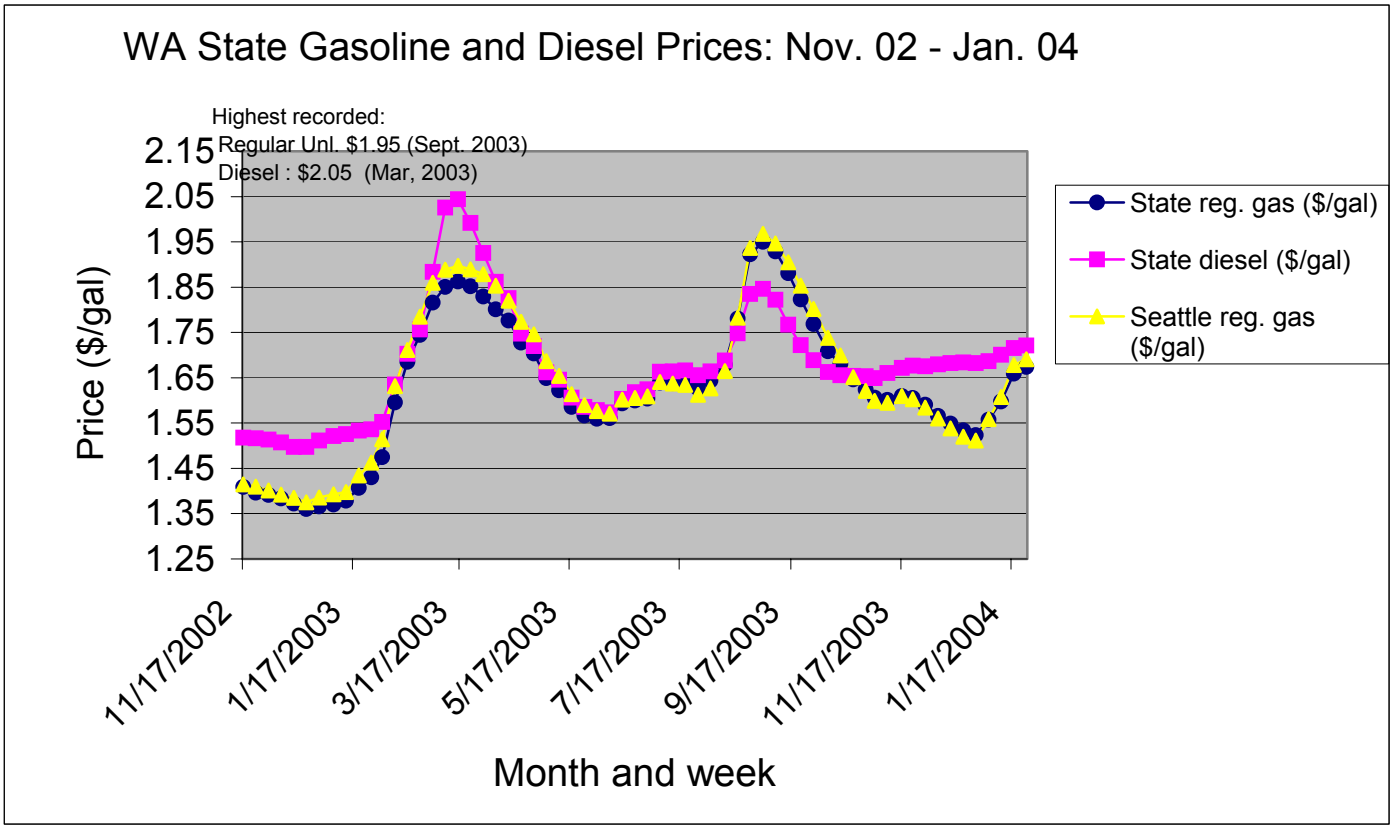
"We felt it was shortsighted for consumers and the region," said Neil Neroutsos, spokesman for the Snohomish district.

Despite the rate relief, the settlement would have imposed other costs on a number of utilities, Neroutsos said.

Bonneville had planned to change its system of credits to investor-owned utilities to a mixture of cash and electricity, but public utilities argued that the rebates were unwarranted and would forced the BPA to raise wholesale rates.

Under the terms of the agreement, the private utilities would have agreed to defer receiving an additional $269 million in BPA payments until 2007, when the agency's next rate period begins.

Gasoline prices have risen over the last 6 weeks, reflecting price increases in petroleum.



Wednesday February 11, 2004

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- Power Pool peak load (Tuesday, 2/10): 50,375 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

- Weekly Range at Mid-C: $40.75-45 per MWh, Ave. = $42.5
- Approximate change from previous week $-1.2 per MWh
- "Normal" price range, before 5/00 $20-$40 per MWh
- Petroleum, West Texas Intermediate: $33.88 per barrel (year ago: $30.25)
- Seattle gasoline price (2/10) $1.71 per gallon (year ago $1.50),
- Natural gas, Sumas Hub: $4.95 per million British Thermal Units (year ago $5.45)
- Approximate change from last week. Oil: -1.10 $ per barrel; Nat. gas: -0.39 $ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
  - A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
  - A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
  - Most recent rotating blackouts: Tuesday, May 8, 2001

- Energy News Headlines from the Nation
  - OPEC to cut crude output by 1 million barrels per day (NYT, Feb. 10)
  - Report questions Bush's plan for hydrogen fueled cars (NYT Feb. 6)

4. River and Snowpack Information (Updated Jan. 27, 2004)

- Observed December stream flow at The Dalles: 74% of average
- Observed December precipitation above The Dalles: 95% of average, 102 MAF
- Observed snow pack, early January: 97% of average
- Federal hydropower generation in December: 8,317 aMW

5. Energy Conservation Achievement (Updated Feb. 11, 2004)

- **State Agencies:** From Oct thru Dec 2003 electrical usage was 9 % less and natural gas usage was 21.3% less compared to the same period in 2000.

6. Power Exchanged: (Feb. 10, 2004)

- Average flow of power during the last 30 days
  - California (exported to) 1,830 MW
  - Canada (exported to) 17 MW
  - Net power export: 1,847 MW

OPEC to Cut Crude Output by 1 Million Barrels a Day

By Simon Romero, NYT Feb. 10

The Organization of Petroleum Exporting Countries decided today to cut its official limits on the output of crude by one million barrels a day beginning April 1, according to oil ministers attending a cartel meeting in Algeria.

The energy ministers had said stricter adherence to their current production quotas — currently 24.5 million barrels a day — was needed to avoid a sharp decline in the price of oil this spring.

The oil minister of Kuwait, Sheikh Ahmad al-Fahd al-Sabah, and other ministers confirmed that OPEC had agreed on the reduction in output and, Reuters reported, that OPEC had also agreed to eliminate about 1.5 million barrels a day of what is called quota busting — exceeding agreed-upon limits on production to take advantage of high prices.

If all member states stick to the agreement, the two measures together would effectively cut OPEC's daily output by about 10 percent.

After word of the decision filtered out of Algiers, oil prices rose on world markets. March futures contracts on the New York Mercantile Exchange rose 71 cents, to $33.54.

OPEC's move emphasizes a more forceful approach in its strategy to pre-empt developments like increased production by non-OPEC members, like Russia and Norway, that might cause oil prices to decline.

Officials in large oil-importing nations, like the United States and Japan, expressed some apprehension with word of OPEC's decision.

"It is our hope that producers do not take actions that undermine the American economy and American workers, and American consumers for that matter," a White House spokesman, Trent Duffy, said. OPEC's president, Purnomo Yusgiantoro of Indonesia, said in remarks prepared for the opening of the gathering in Algiers that the purpose of the meeting was to review the state of the international oil market and determine whether OPEC needed to revise its production agreement.

"As you will recall, this agreement is based on the OPEC-10 output ceiling of 24.5 million barrels a day," he said in the speech, which was posted on the OPEC Web site. The agreement was rolled over at the group's conference in Vienna two months ago, after it had decided to return to the ceiling in September, he said.

"Crude oil prices have remained high since our last meeting on 4 December, and there have been calls for OPEC to raise its output ceiling to help bring prices down," Mr. Yusgiantoro said.

He said that the market was well supplied with crude, but that low inventory levels in the United States, "excessive speculation and continued geopolitical tensions" were mitigating factors to the benefits.

"Even if we could make a significant and immediate increase in supply now, we would be reluctant to do so," Mr. Yusgiantoro said. "This is because OPEC views oil market dynamics as a

continuum which extends beyond immediate short-term concerns and embraces likely developments months and perhaps even a year ahead.

"Our projections indicate that there will be a significant surplus of oil in the second quarter of this year, and, if this is not handled in a timely and effective manner, there is likely to be excessive downward pressure on prices, leading to a protracted spell of volatility in the market, which will be in nobody's interests."

Chakib Khelil, the oil minister of Algeria and the host of the meeting, had said members were exceeding the group's quota of 24.5 million barrels a day by about 1.75 million barrels in extra daily production. His was one of several public acknowledgments by delegates before today's meeting that members were flouting quotas to profit from high oil prices.

Revenue from international sales by OPEC, which accounts for about a third of world oil production, surged nearly 25 percent in 2003 — to $247 billion from $199 billion the previous year — as oil prices climbed to their highest annual average level in two decades, according to Cambridge Energy Research Associates. This windfall has made it difficult for the 11 members of OPEC, many of them under fiscal strain, to adhere to their own quotas.

Report Questions Bush Plan for Hydrogen-Fueled Cars

By MATTHEW L. WALD, Feb 6

President Bush's plan for cars running on clean, efficient hydrogen fuel cells is decades away from commercial reality, according to a report by the National Academy of Sciences.

Promoting the technology in his State of the Union address a year ago, Mr. Bush said a hydrogen car might be available as the first vehicle for a child born in 2003. On Monday, the Energy Department included $318 million for both fuel cells and hydrogen production in its 2005 budget. "Hydrogen is the next frontier; a hydrogen economy is where the world is headed," said Spencer Abraham, the secretary of energy.

The Bush administration anticipates mass production of hydrogen cars by 2020. But the academy study, released Wednesday, said some of the Energy Department's goals were "unrealistically aggressive."

Fuel cells produce electricity by putting hydrogen through a chemical process, rather than burning, and their exhaust consists solely of water and heat. Some scientists think they have great promise, not only because they are clean, but also because the hydrogen can be produced from solar or wind power, thus reducing oil imports and the emission of gases that cause global warming.

But the least-expensive methods of hydrogen production use fuels like coal or natural gas, and those create pollution, experts say. Hydrogen is also difficult to ship and store. In addition, power from fuel cells is far more costly than the same amount of power from a gasoline engine.

"Real revolutions have to occur before this is going to become a large-scale reality," said one of the report's authors, Dr. Antonia V. Herzog, a staff scientist at the Natural Resources Defense Council. "It very possibly could happen, but it's not a sure thing."

The report said battery-powered cars or hybrid cars, which use gasoline and electric motors, could turn out to be better choices. And over the next 25 years, the effects of hydrogen cars on oil imports and global-warming gas emissions "are likely to be minor," the report said.

A second pessimistic assessment came from Joseph J. Romm, the chief Energy Department official in charge of conservation and alternative energy in the Clinton administration. His book "The Hype About Hydrogen" will be published this spring.

"Fuel-cell cars will not be environmentally desirable for decades, because there are better uses for the fuels you can make the hydrogen out of," Mr. Romm said in a telephone interview.

Most hydrogen produced today is made from natural gas, he said, and using that gas to make electricity, and thus replace coal-based electric plants, would do more for the environment than using the gas to make hydrogen to replace gasoline. He said society would get more energy from a cubic foot of natural gas burned in a modern gas-powered electric plant than if it was converted to hydrogen.

Mr. Romm also said there is currently no way to deliver the hydrogen to vehicles. "People who want to build `hydrogen highways' and drive a hydrogen car in 10 or 15 years on a mass scale, are just kidding themselves," he said.

The Bush administration has shifted emphasis from a Clinton-era program to develop hybrid cars into a far more ambitious, long-term project to commercialize fuel cells.

Mr. Abraham, the energy secretary, said he had recently been host of a meeting of energy ministers from around the world, and they agreed that fuel cells offered promise for reducing pollution and dependence on imported energy. "I see it as not only a wise investment for America," Mr. Abraham said, "but really where the world is heading."

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- Energy News Headlines from the Nation
  - Pet projects weigh down energy bill (NYT, Feb. 18)
  - Natural gas costs hurt US firms (WSJ Feb. 17)
  - El Paso reduces reserves, prompting asset write-down (WSJ Feb. 18)

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o Canada (exported to)	87 MW
o Net power export:	1,955 MW

AP: Pet Projects Weigh Down Energy Bill

NYT, February 18, 2004

Researchers and companies working to prevent future power blackouts are seeing their federal funding slip away to lawmakers' home-district projects, including research on ceramic engines and burning recycled carpets as fuel.

Bush administration officials confirm they are being forced to cut or reroute federal money from superconductor technology research to make way for the pet projects that Congress approved in an energy spending bill last fall.

The research, which is aimed at increasing the capacity of electrical transmission lines fivefold -- tenfold eventually -- gained new urgency last summer after a huge blackout darkened much of the Northeastern United States.

The technology is attractive because it would allow more electricity to reach customers, especially during high-demand summer months, without having to build new, aboveground transmission lines.

Researchers expressed alarm at the timing of the cuts.

``It has taken us 15 years to build this up," said Dr. Dean Peterson, leader of the Superconductivity Technology Center at the Los Alamos National Laboratory in New Mexico. ``If you start cutting back, outstanding people will be demoralized and look for other jobs. That would be catastrophic."

Added Robert Hawsey, who directs superconductivity research at the national laboratory in Oak Ridge, Tenn.: ``If the government ramps down, you can miss the boat and may well be buying this stuff from Japan, China, South Korea and Germany."

The culprits, according to those involved, are previously rejected pet projects that were included in last fall's $27.3 billion energy and water appropriations bill by congressional negotiators.

The projects were specifically attached to the 2004 budget for a new Energy Department office that finances research to upgrade the nation's blackout-prone electricity grid, meaning the money must be spent by that agency even though many of the projects don't involve the grid.

The congressional negotiators recommended $47.8 million for research into high-temperature, superconducting cables and generation equipment.

But the Energy Department's Office of Electricity Transmission and Distribution said it will only be able to spend $32 million because it is stuck with $26 million in congressional projects it doesn't want.

Some of the congressionally mandated programs -- known as earmarks -- baffled the director of the new transmission office, James Glotfelty.

Asked to explain the objective of the $300,000 Georgia Institute of Technology project on the use of recycled carpet as fuel for kilns, Glotfelty responded, ``I don't know." More importantly, he said it had no connection to his office.

Among the other congressional projects:

--$2 million for the PowerGrid simulator at Drexel University in Philadelphia and the New Jersey Institute of Technology in Newark. The project finished last in a competitive review by experts, Glotfelty said.

--$1 million for a joint research program between Wright State University in Dayton, Ohio, and the University of Albany in New York, in collaboration with Wright Patterson Air Force Base, to enhance the performance of second-generation, high temperature coated superconductors. This project lost a competition for funding previously, according to Glotfelty.

-- $300,000 for research on advanced ceramic engines and materials for energy applications. The project has no connection to the electrical transmission office, the director said.

--$4 million to continue research on aluminum matrix composite conductors, far more than the office planned to spend on that technology, Glotfelty added.

The superconductivity research received $40.7 million in 2003, including grants to companies that matched half of the amount.

Despite the budget crunch lawmakers helped create, some are unhappy that the administration hasn't found a way to fully fund the superconductivity research.

``This is almost a silver bullet, given how difficult it is to locate new transmission lines, while the demand for electricity is increasing," said Sen. Charles Schumer, D-N.Y., who has companies in his state interested in producing the high capacity system.

Schumer said he would join with other lawmakers to find the money.

Dr. Balu Balachandran, who directs a superconducting program at the Argonne National Laboratory near Chicago, said his lab was within three years of launching demonstration projects with the newest technology.

``It's a terrible thing to happen," he said of the cutbacks.

Natural-Gas Costs Hurt U.S. Firms;

High Prices Are Prompting Companies to Conserve And Move Work Overseas

WSJ, Feb. 17

High natural-gas prices in the U.S. are taking an increasing toll on a range of companies, forcing them to change how they operate and even to shift work to parts of the world where energy prices are lower.

Some companies are updating or retuning older equipment and fixing minor leaks they used to ignore. Others are switching packing materials or looking to overseas sources for plastic wraps, fertilizer and other basic goods that are made from natural gas -- moves that ultimately will mean the loss of U.S. jobs.

For manufacturers already dealing with rising health-care costs for their workers, high natural-gas prices mean another unavoidable cost that can't be passed on to customers. Much of what these companies produce vies for customers in a global market with many lower-cost overseas rivals. The squeeze between cost and pricing pressures means less money for capital investment and for hiring new workers -- and potentially a drag on economic recovery. Higher natural-gas prices also undermine U.S. efforts to reduce the nation's dependence on overseas sources of energy.

Manufacturing companies say they realize they can't ignore the problem any longer. "The high spikes we saw in natural-gas prices were a wake-up call to management," says Jim Pease, corporate energy manager for Unilever, the Anglo-Dutch food company that has increased its spending on energy-efficiency measures since 2001. "The old days of stable, cheap energy prices are over."

After decades of being cheap and plentiful, U.S. natural-gas prices left the range of $2 to $3 per million British thermal units of the latter 1990s and hit two sharp spikes in the past four years before settling in to an average weekly spot price above $4 per million BTUs, where they have remained for an unprecedented 15-month run. U.S. natural gas is the most expensive in the industrialized world, averaging $5.50 per million BTUs for the past year.

At Amazon.com Inc. of Seattle, higher natural-gas prices have raised the price of air pillows used to buffer its products while in transit. Last year, air pillows made up 40% of the packaging cost of each Amazon box, up from 30% a year earlier. The plastic pillow that contains the air is made from natural gas.

The Internet retailer said it is considering using fewer air pillows or turning to more wraparound cardboard boxes, which it dubs "ravioli" wrap. Customers prefer the air pillows, but the rapidly inflating cost "affects our ability to keep prices low," says spokesman Chris Bruzzo.

The root of higher natural-gas prices is a federal policy that promotes use of the relatively cleaner-burning fuel without providing incentives or means for natural-gas companies to increase production. So while demand soared in recent years, especially from a raft of new gas-fired power plants, producers have struggled with supply. Most North American gas fields are years past their prime, and environmental restrictions prevent drilling on many of the most promising areas.

The chemical industry, which uses natural gas as a fuel and as a raw material, has been hit hardest. The rising cost of U.S. natural gas began battering these manufacturers at the same time the weak economy was damping demand for commodity chemicals and foreign producers were increasing their share of the U.S. market for chemical-based products such as plastic shopping bags.

U.S. chemical makers have lost an estimated 78,000 jobs since natural gas prices began to rise in 2000. Louisiana, a hub of chemical production, lost 4,400 chemical-related jobs over the same span, or about 15% of that work force.

Almost all new production of chemicals and plastics will take place in the Middle East and Asia, where natural gas is more plentiful, producers say. Charles O. Holliday Jr., chairman and chief executive of DuPont Co., told investors in December that high energy costs will prompt the company to shift its "center of gravity" overseas.

Last month, Mr. Holliday joined top executives of Dow Chemical Co., Eastman Chemical Co., Rohm & Haas Co. and others in a letter asking President Bush and congressional leaders to lower royalties on some gas production, to allow more drilling in the U.S. and to reduce the incentives that promote the use of natural gas for electricity generation. If nothing is done, they warned, "investments and jobs will increasingly go to Asia and the Middle East."

Owens Corning, which ran ads in the 1970s urging customers to buy its pink insulation to cut their dependence on foreign oil, now finds itself scrambling to find new ways to cut its dependence on pricey U.S. gas. The company is operating under bankruptcy-law protection while it works out its asbestos liabilities, and high natural-gas prices are squeezing its margins and eroding profits.

"It's still our energy source of choice, but the big issue is the economics of natural gas in the U.S. relative to the rest of the world," said Mike Thaman, chairman and chief financial officer.

The company has begun to import more materials from overseas. Last fall, Owens Corning moved a top executive to Shanghai to find cheaper sources of polypropylene bags used to package rolls of insulation. By the end of this year, the company expects to import as much as half of its packaging material, lowering costs by 20% to 25%. In the past, all packaging material came from North American producers.

In a couple of years, the company expects 30% of its nearly $1 billion a year in purchases of minerals, chemicals and packaging to come from outside North America, up from 10% today, company officials say.

Last year, the Toledo, Ohio, company also began to experiment with an insulation factory in Waxahachie, Texas, that was burning as much as $4 million to $5 million in natural gas a year.

The company installed four meters on each of the three enormous production lines to measure natural-gas usage by the minute. Consultants figured out settings for the incinerators and melters that would cut usage without sacrificing product quality. With adjustments, natural-gas use in the third quarter of 2003 was 18% below the year before, even though production has increased. The plant is now approaching $1 million in annual energy savings.

Even the smallest adjustments matter. One day last summer, Gary Chastain, the plant's energy guru, saw that the steam boilers overnight had begun using more than double the normal level of gas. He dispatched maintenance workers, who searched for nearly two months to find the culprit: a leaking valve that was costing Owens Corning about $460 a day.

The Waxahachie experiment has been so successful that the changes will be replicated in 10 other North American insulation factories and two composite-fiber factories by the end of this year.

El Paso Corp. Reduces Reserves, Prompting Asset Write-Down

WSJ, Feb. 18
El Paso Corp. said it reduced its proven natural-gas reserves by 35% after a review, requiring it to write down the value of its natural- gas assets by $1 billion in the fourth quarter.

The Houston natural-gas and pipeline company, which has struggled to right itself after the energy trading debacle, also said it hired Haynes & Boone, a law firm based in Dallas, to look into the cause of such a substantial write-down. It didn't elaborate.

El Paso said it reduced its proven reserves by 1.8 trillion cubic feet of natural gas or the equivalent, a cut of about one-third from the 5.23 trillion cubic feet it had at the beginning of 2003.

The steep markdown of the company's reserves follows a sharp reduction in proven reserves at Royal Dutch/Shell Group's oil and a smattering of revisions at other companies with fields that aren't producing as well as expected.

Like Shell, El Paso said that some of the reserves will move to the "probable" category, meaning that natural gas may be there but its existence is less sure. For instance, El Paso moved 37 billion cubic feet of gas reserves in Brazil out of the "proven" category because it doesn't yet have a contract for that gas.

After other moves, like assets sales, additions and production, the company said it now starts 2004 with proven reserves of 2.6 trillion cubic feet, just half of what the company reported that it had at the beginning of 2003.

More than 40% of the revision came from fields in South Texas, which aren't producing as expected. It also took a sharp reduction in its coal-bed methane reserves, which are largely in New Mexico.

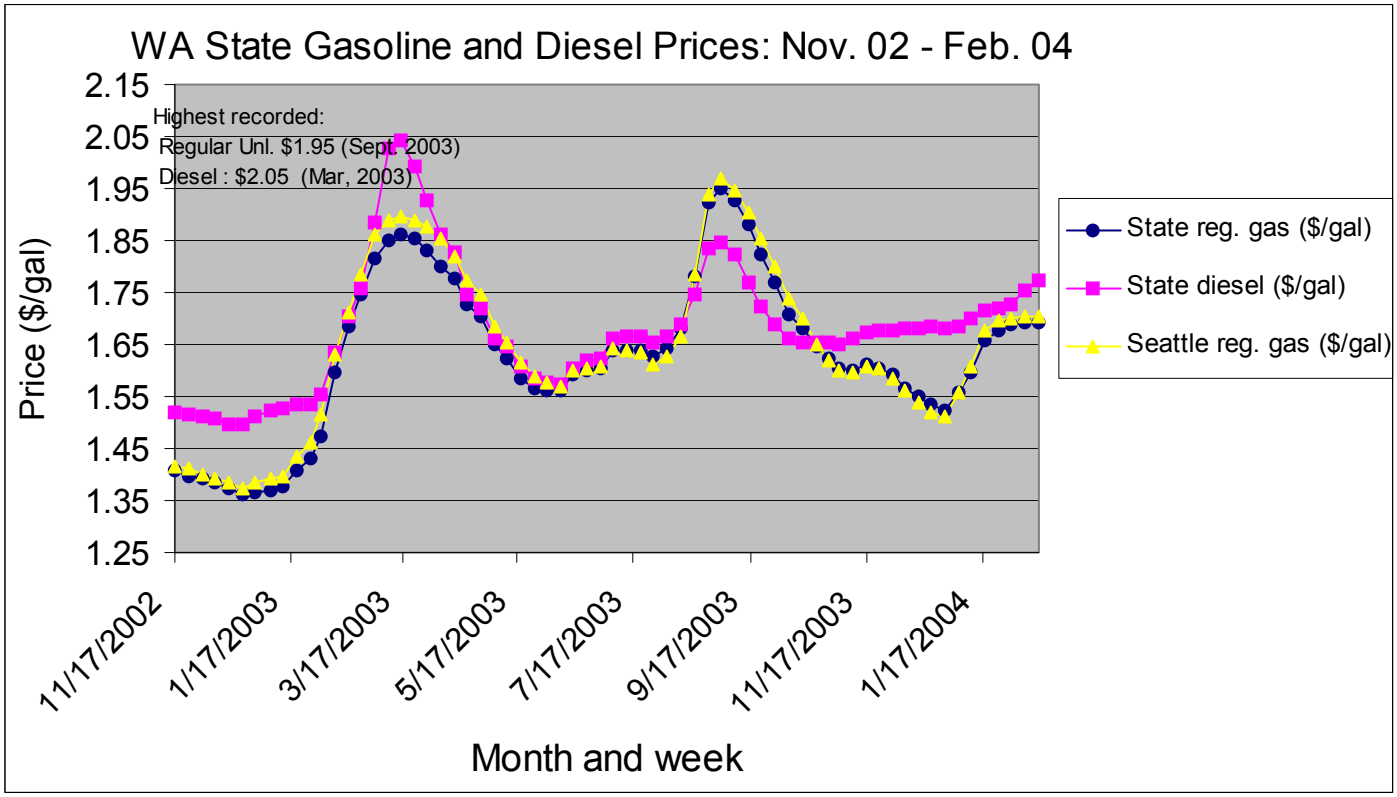
El Paso also warned that more write-downs could be coming in the current year if natural-gas prices drop. With natural-gas production falling in the U.S. and demand growing, natural-gas prices have been unusually strong.

To pay down debt and get its house in order after losing millions of dollars in its energy-trading business, El Paso has been shedding assets, including a recent sale of Canadian properties for $346 million. Despite the reduction in proven reserves, El Paso said it expects its production to remain on target in 2004.

The company brought in Doug Foshee as chief executive officer in September and recently hired Lisa Stewart from rival Apache Corp. to run its exploration business.

Wednesday February 18, 2004

WA gas and diesel prices have stabilized for the time being.



Wednesday February 25, 2004

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 2/24): 47,010 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C:	$39.8-43.1 per MWh, Ave. = $41.4
• Approximate change from previous week	$-1.0 per MWh
• "Normal" price range, before 5/00	$20-$40 per MWh
• Petroleum, West Texas Intermediate:	$35.78 per barrel (year ago: $35.83)
• Seattle gasoline price (2/24)	$1.76 per gallon (year ago $1.77),
• Natural gas, Sumas Hub:	$4.69 per million British Thermal Units (year ago $5.45)
• Approximate change from last week.	Oil: +0.66 $ per barrel; Nat. gas: -0.25 $ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
  - A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
  - A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
  - Most recent rotating blackouts: Tuesday, May 8, 2001

- Energy News Headlines from around the Nation
  - People favor solar power, but not in their neighborhood (WSJ, Feb. 25)
  - Forecasting rising oil demand challenges tired Saudi fields (NYT Feb. 24)

4. River and Snowpack Information (Updated: Feb. 25, 2004)

- Observed January stream flow at The Dalles: 77.3% of average,
- Observed January precipitation above The Dalles: 101% of average,
- Observed snow pack, early February: 104% of average,
- Estimated Jan.-July runoff at The Dalles: 98.2 MAF, 92% of normal,
- Federal hydropower generation in January: 7,897 aMW, 1995-2002 average: 10,636 aMW.

5. Energy Conservation Achievement (Updated: Feb. 11, 2004)

- **State Agencies:** From Oct thru Dec 2003 electrical usage was 9 % less and natural gas usage was 21.3% less compared to the same period in 2000.

6. Power Exchanged: (Updated: Feb. 25, 2004)

- Average flow of power during the last 30 days
  - California (exported to) 1,845 MW
  - Canada (exported to) 420 MW
  - Net power export: 2,265 MW

People Favor Solar Power -- but Not in Their Neighborhood

WSJ, Feb, 25

As solar power devices appear on more roofs around the nation, they are generating more than just hot water or electricity: Some are creating controversy from neighbors who think they're ugly.

In Florida, as many as 50 homeowners associations a year try to keep residents from putting solar panels on their rooftops, despite a state law that forbids them from imposing such restrictions, say attorneys for the solar industry. The law provides no punishment to inhibit associations from seeking such restrictions. That forces residents who want to install panels to file a costly lawsuit against an association, or to try to negotiate a compromise that may include a visual barrier or moving the panels farther back on a roof.

In Arizona, installers of solar equipment say they have met with dozens of homeowners associations in recent years to mediate concerns that the panels detract from a community's aesthetics. Even though Arizona law expressly prohibits such associations from making it difficult for homeowners to use solar power, installers say many residents opt to drop their plans to avoid the inconvenience of going to court.

"I think that the tactic of many associations is to just make it hard for the homeowner, and it's a shame," says Kelly Dancer, director of Heliocol Solar Pool Heating, an installation company in Tempe, Ariz.

Hank Speak has fought his neighbors for six years to keep his solar power. A 71-year-old retiree in the Phoenix suburb of Avondale, Ariz., Mr. Speak in 1997 installed a row of solar panels to heat his swimming pool in the winter. He picked panels that match his roof tile and placed them on the home's backside, facing a greenbelt. Nonetheless, his homeowners association hit him with a lawsuit and fines that eventually totaled about $100,000, arguing that the panels were unsightly and violated the community's covenants.

Mr. Speak prevailed last year when a state judge ruled that the association's restrictions conflicted with state law advocating solar power; an appeals court upheld the decision.

His neighbors remain unhappy, even though most profess to support solar power and other alternative energies. "You don't want to see some eyesore up there," says Frank DiLodovico, treasurer of the Garden Lakes Community Association.

Similar run-ins have flared in dozens of Sunbelt cities, from Florida to California, as the U.S. uses more solar power. Although highly touted in the 1970s, solar-generated electricity didn't start taking off until the 1990s, when the cost of the systems began dropping sharply thanks to new technology and state and federal tax incentives for using it.

Now, production of solar energy in the U.S. by all sources has jumped more than tenfold since 1993, to about 300 megawatts, or enough to power about 300,000 homes, according to estimates by industry officials. More growth is likely, as traditional energy sources become pricier and more erratic and government officials, in the Sunbelt and elsewhere, call for use of alternative energy. Solar has taken off most in states that have abundant sunshine, but its use is also spreading in New Jersey, New York and other Frostbelt areas.

Yet the sight of the flat, rectangular panels in different colors popping up on rooftops is creating a stir in some neighborhoods. In California, where the nation's solar movement has gained the most ground, as many as 20 communities have enacted laws making it harder to install the systems.

Even a company that sells solar energy systems got into hot water after it installed solar panels on its own roof. The company, Akeena Solar, in the Silicon Valley town of Los Gatos, Calif., was notified by local officials last year to erect a fence to hide the panels after a city inspector reported being able to see them from the street, a violation of municipal code.

But Akeena officials complained that the cost of building such a screen would offset their solar power savings, and say they had already gone to great lengths to conceal the blue-colored panels atop their 3,400-square-foot headquarters. "You have to tip your head to see the panels, which are peeking out from behind two air-conditioning units," says Barry Cinnamon, president of Akeena, which is suing to gain an exemption from the city ordinance. "And you almost miss the solar panels because they match the color of the blue sky."

Town officials defend their action, saying they are trying to protect the architectural integrity of the upscale community, where Victorian homes press up against the Santa Cruz Mountains. Yet many residents have spoken out on behalf of Akeena, saying the town shouldn't be stifling a clean energy source that it officially supports. Some also point out that Akeena's building sits in an industrial zone. "What all my customers gripe about are all the power lines over this street, not solar panels," says Jim Kooper, a nearby barber.

Meanwhile, some manufacturers report getting more orders from customers to match the colors of their roofs, in hopes the power systems will blend in better. Officials at PowerLight Corp. of Berkeley, Calif., for example, say they are selling more panels that resemble actual roofing material.

"You can put these panels on your roof so it looks like an add-on [an addition]," says Tom Dinwoodie, founder and chief executive of PowerLight, "or you can add it on to make it look like a skylight, and it looks fine."

Forecast of Rising Oil Demand Challenges Tired Saudi Fields

By JEFF GERTH
WSJ, February 24, 2004

When visitors tour the headquarters of Saudi Arabia's oil empire — a sleek glass building rising from the desert in Dhahran near the Persian Gulf — they are reminded of its mission in a film projected on a giant screen. "We supply what the world demands every day," it declares.

For decades, that has largely been true. Ever since its rich reserves were discovered more than a half-century ago, Saudi Arabia has pumped the oil needed to keep pace with rising needs, becoming the mainstay of the global energy markets.

But the country's oil fields now are in decline, prompting industry and government officials to raise serious questions about whether the kingdom will be able to satisfy the world's thirst for oil in coming years.

Energy forecasts call for Saudi Arabia to almost double its output in the next decade and after. Oil executives and government officials in the United States and Saudi Arabia, however, say capacity will probably stall near current levels, potentially creating a significant gap in the global energy supply.

Outsiders have not had access to detailed production data from Saudi Aramco, the state-owned oil company, for more than 20 years. But interviews in recent months with experts on Saudi oil fields provided a rare look inside the business and suggested looming problems.

An internal Saudi Aramco plan, the experts said, estimates total production capacity in 2011 at 10.15 million barrels a day, about the current capacity. But to meet expected world demand, the United States Department of Energy's research arm says Saudi Arabia will need to produce 13.6 million barrels a day by 2010 and 19.5 million barrels a day by 2020.

"In the past, the world has counted on Saudi Arabia," one senior Saudi oil executive said. "Now I don't see how long it can be maintained."

Saudi Arabia, the leading exporter for three decades, is not running out of oil. Industry officials are finding, however, that it is becoming more difficult or expensive to extract it. Today, the country produces about eight million barrels a day, roughly one-tenth of the world's needs. It is the top foreign supplier to the United States, the world's leading energy consumer.

Fears of a future energy gap could, of course, turn out to be unfounded. Predictions of oil market behavior have often proved wrong.

But if Saudi production falls short, industry experts say the consequences could be significant. Other large producers, like Russia and Iraq, do not have Saudi Aramco's huge reserves or excess oil capacity to export, and promising new fields elsewhere are not expected to deliver enough oil to make up the difference.

As a result, supplies could tighten and oil prices could increase. The global economy could feel the ripples; previous spikes in oil prices have helped cause recessions, though high oil prices in the last year or so have not slowed strong growth.

Saudi Aramco says its dominance in world oil markets will grow because, "if required," it can expand its capacity to 12 million barrels a day or more by "making necessary investments," according to written responses to questions submitted by The New York Times.

But some experts are skeptical. Edward O. Price Jr., a former top Saudi Aramco and Chevron executive and a leading United States government adviser, says he believes that Saudi Arabia can pump up to 12 million barrels a day "for a few years." But "the world should not expect more from the Saudis," he said. He expects global oil markets to be in short supply by 2015.

Fatih Birol, the chief economist for the International Energy Agency, said the Saudis would not be able to increase production enough for future needs without large-scale foreign investment.

The I.E.A., an independent agency founded by energy-consuming nations, and Washington see investment in energy exploration and field maintenance as vital, but such proposals face strong opposition inside Saudi Arabia. Tensions with the West, particularly the United States, make such investment politically difficult for Saudi society. For example, an effort by Crown Prince Abdullah, the kingdom's de facto ruler, to encourage Western companies to invest $25 billion in his country's natural gas industry essentially collapsed last year.

"Access to Persian Gulf oil reserves, especially Saudi Arabia's, is the key question for the whole world," Dr. Birol said.

President Bush has said he wants to make the United States less reliant on oil-producing countries that "don't like America" by diversifying suppliers and financing research into hydrogen fuel cells, but achieving that remains far off.

His administration backs foreign investment initiatives in the gulf region, including Saudi Arabia, and his energy policies rely on Energy Department projections showing the world even more dependent on Arabian oil in 20 years. That may be enough time for governments to find alternatives, but oil field development requires years of planning and work.

Publicly, Saudi oil executives express optimism about the future of their industry. Some economists are equally optimistic that if oil prices rise high enough, advanced recovery techniques will be applied, averting supply problems.

But privately, some Saudi oil officials are less sanguine.

"We don't see us as the ones making sure the oil is there for the rest of the world," one senior executive said in an interview. A Saudi Aramco official cautioned that even the attempt to get up to 12 million barrels a day would "wreak havoc within a decade," by causing damage to the oil fields.

In an unusual public statement, Sadad al-Husseini, Saudi Aramco's second-ranking executive and its leading geologist, warned at an oil conference in Jakarta in 2002 that global "natural declines in existing capacity are real and must be replaced."

Dr. al-Husseini, one Western oil expert said, has been "the brains of Saudi Aramco's exploration and production." But he has told associates that he plans to resign soon, and his departure, government oil experts in the United States and Saudi Arabia say, could hinder Saudi efforts to bolster production or entice foreign investment.

Saudi Arabia's reported proven reserves, more than 250 billion barrels, are one-fourth of the world's total. The most significant is Ghawar. Discovered in 1948, the 300-mile-long sliver near the Persian Gulf is the world's largest oil field and accounts for more than half of the kingdom's production.

The company told The New York Times that its field production practices, including those at Ghawar, were "at optimum levels" and the risk of steep declines was negligible. But Mr. Price, the former vice president for exploration and production at Saudi Aramco, says that North Ghawar, the most valuable section of the field, was pushed too hard in the past.

"Instead of spreading the production to other fields or areas," Mr. Price said, the Saudis concentrated on North Ghawar. That "accelerated the depletion rate and the time to uncontrolled decline," or the point where the field's production drops dramatically, he said.

In Saudi Arabia, seawater is injected into the giant fields to help move the oil toward the top of the reservoir. But over time, the volume of water that is lifted along with the oil increases, and the volume of oil declines proportionally. Eventually, it becomes uneconomical to extract the oil. There is also a risk that the field can become unstable and collapse.

Ghawar is still far too productive to abandon. But because of increasing problems with managing the water, one Saudi oil executive said, "Ghawar is becoming very costly to maintain."

The average decline rate in Saudi Aramco's mature fields — Ghawar and a few others — "is in the range of 8 percent per year," without additional remediation, according to the company's statement. This means several hundred thousand barrels of daily oil production would have to be added every year just to make up for the diminished output.

Every oil field is unique, and experts cannot predict how long each might last. For its part, Saudi Aramco is counting on Ghawar for years to come.

The company projects that Ghawar will continue to produce more than half its oil. One internal company estimate from 2002 puts Ghawar's production at 5.25 million barrels a day in 2011, more than half the total expected crude oil capacity of 10.15 million, according to United States government officials and oil executives.

"The big risk in Saudi Arabia is that Ghawar's rate of decline increases to an alarming point," said Ali Morteza Samsam Bakhtiari, a senior official with the National Iranian Oil Company. "That will set bells ringing all over the oil world because Ghawar underpins Saudi output and Saudi undergirds worldwide production."

The I.E.A. warned in November that huge investments would be needed to offset the decline rates in mature Middle Eastern oil fields — it put the average at 5 percent — and the increasing costs of oil and gas production. The agency, based in Paris, forecasts that Saudi production will need to reach 20 million barrels a day by 2020. (I.E.A. and other research estimates say that more than 90 percent of that would be crude oil; the rest would be liquid products like natural gas liquids that result from the processing of crude oil.)

In his speech in Jakarta, Dr. al-Husseini noted the need for exploration, pointing out that colleagues at Exxon Mobil predict that more than 50 percent of oil and gas consumption in 2010 must come from new fields and reservoirs.

Harry A. Longwell, the executive vice president of Exxon Mobil, says finding new sources of oil is crucial. Mr. Longwell, in an interview, said that increasing demand and declining production were not new problems, but they were "much larger now because of the world's demand for energy and the magnitude of the numbers now are much larger."

To offset its declines, Saudi Aramco is bringing back into production one idle field, Qatif, and is enhancing production at a nearby offshore field, Abu Safah. The company says that with expert management, these fields will produce about 800,000 barrels a day.

But current and former Saudi Aramco executives question those expectations, contending that the goal of 500,000 barrels a day for Qatif is unrealistic and that development costs are higher than anticipated.

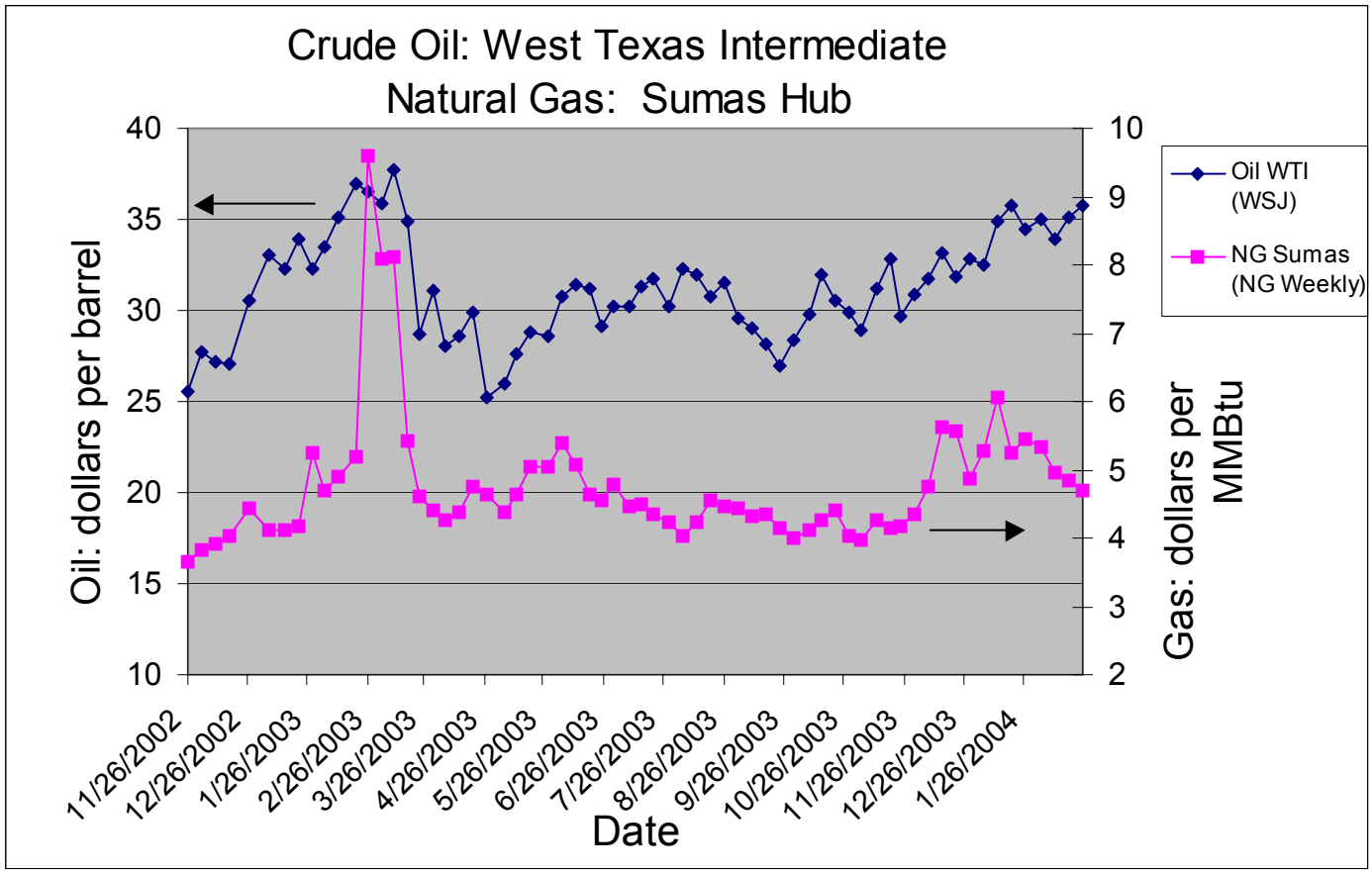
Qatif poses real difficulties. It is near housing for Saudi Arabia's minority Shiite population and contains high concentrations of hydrogen sulfide, a highly toxic gas. Its development is "particularly challenging," according to a technical paper by Saudi Aramco engineers presented last year in Bahrain, which said that 45 percent of potential drilling sites "were rejected due to safety concerns."

At Abu Safah, Saudi Aramco has experienced increasing water problems as it has turned to submersible pumps to extract oil. Experts, including American and Saudi government officials, say the technique is ill advised. Saudi Aramco, in its written response to questions, defended the use of the pumps at Abu Safah and its ability to manage the water after 37 years of production.

One United Sates government energy expert noted that "submersible pumps is what the Soviets went to on an indiscriminate basis in West Siberia and it went south." Samotlor, a huge field in Siberia, once produced more than three million barrels a day, but it declined sharply in the 1980's after the Soviets pushed it too hard. Today it produces only a few hundred thousand barrels a day.

Wednesday February 25, 2004

Petroleum prices are trending higher as producers and refiners begin to prepare for the spring/summer driving season, while natural gas prices are trending lower as the winter heating season draws to a close



Tuesday March 2, 2004

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 3/1): 43,955 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C:	$38.4-41.4 per MWh, Ave. = $39.4
• Approximate change from previous week	$-2.0 per MWh
• "Normal" price range, before 5/00	$20-$40 per MWh
• Petroleum, West Texas Intermediate:	$35.33 per barrel (year ago: $35.83)
• Seattle gasoline price (3/1)	$1.81 per gallon (year ago $1.82),
• Natural gas, Sumas Hub:	$4.42 per million British Thermal Units (year ago $5.45)
• Approximate change from last week.	Oil: -0.44 $ per barrel; Nat. gas: -0.17 $ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
  - A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
  - A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
  - Most recent rotating blackouts: Tuesday, May 8, 2001

- Energy News Headlines from around the Nation
  - Panel approves PG&E rate cut (Sac. Bee, Feb.27)
  - Intel backs a more efficient PC power supply (WSJ, Feb. 26)
  - Carmakers split over timing of hydrogen powered vehicles (WSJ Feb. 26)

4. River and Snowpack Information (Updated: Feb. 25, 2004)

- Observed January stream flow at The Dalles: 77.3% of average,
- Observed January precipitation above The Dalles: 101% of average,
- Observed snow pack, early February: 104% of average,
- Estimated Jan.-July runoff at The Dalles: 98.2 MAF, 92% of normal,
- Federal hydropower generation in January: 7,897 aMW, 1995-2002 average: 10,636 aMW.

5. Energy Conservation Achievement (Updated: Feb. 11, 2004)

- **State Agencies:** From Oct thru Dec 2003 electrical usage was 9 % less and natural gas usage was 21.3% less compared to the same period in 2000.

6. Power Exchanged: (Updated: Mar. 2, 2004)

- Average flow of power during the last 30 days

o California (exported to)	1,697 MW
o Canada (exported to)	509 MW
o Net power export:	2,206 MW

Panel approves PG&E rate cuts

First decrease since state's energy crisis will see bills drop an average of 8 percent.

Carrie Dahlberg, Sac. Bee. *February 27, 2004*

The first rate cuts since California's energy crisis sent Pacific Gas and Electric Co. bills exploding upward by 40 percent will take effect starting Monday, with bills dropping an average of 8 percent, state regulators agreed Thursday.

Ignoring pleas by two commissioners that a little more delay could produce greater savings, the state Public Utilities Commission voted 3-2 to approve a formula for divvying up the rate break it authorized in December. PG&E, which had been poised to put the cuts into effect as soon as possible after the vote, will start using the lower rates March 1, although people whose meters are read in early March won't feel much impact until their April bills.

Residential customers will see an average cut of 4 percent, while large industrial and agricultural power users, who faced bigger rate hikes during the crisis, will also see bigger cuts now, of about 15 percent.

"This is a new day. We're taking one more step in coming out of California's energy crisis," said PG&E spokeswoman Christy Dennis.

The utility's customers were less elated.

"This decrease, although welcome, doesn't come close to undoing the damage done to consumers by deregulation," Bob Finkelstein, executive director of The Utility Reform Network, said in a prepared statement.

Lawmakers and utilities alike had predicted that deregulation would slice electric rates. Among those making the rosy forecasts, Finkelstein pointed out, was PG&E top executive Robert Glynn, who was awarded $17 million in bonuses in 2003, partly for staying with the utility through its bankruptcy reorganization.

"PG&E has nothing to brag about," Finkelstein said.

Even so, TURN was among many consumer groups that had already agreed on the formula that was brought to the PUC for approval Thursday. Without that agreement, there could have been months of legal battles among representatives of larger and smaller energy users about how the overall $800 million rate cut should be divided.

The rate cut is possible partly because PG&E collected much more money than it needed last year, when regulators kept rates high even while utility costs were dropping. Once regulators and the utility reached agreement - also on a 3-2 vote in December - on how to end PG&E's reorganization case, some of that money was put toward PG&E's debts and it became possible to bring rates closer to costs.

With PG&E customers bearing the burden of higher rates since 2001, "it's only fair that they also get the benefits" now that rates can come down, said PUC President Michael Peevey.

Peevey and Commissioners Susan Kennedy and Geoffrey Brown voted to override a request by fellow Commissioner Carl Wood to delay the vote for three weeks. Peevey, Kennedy and Brown then approved the rate cut plan; Wood and Commissioner Loretta Lynch voted no.

Both said they were concerned that the residential customers weren't getting large enough rate cuts, and that other accounting changes could have meant bigger rate reductions.

"I find little to be self-congratulatory about," said Lynch. "We're still leaving significant money off the table."

It's clear that more cuts will be on the way as federally ordered refunds and settlements over crisis-related misbehavior make their way to PG&E, and as state lawmakers take up legislation that could finance some utility debt more cheaply.

Peevey has estimated the cuts, including Thursday's, might total 15 percent in coming months.

Thursday's decision will make almost no dent in an average household electric bill for 521 kilowatt hours, which will drop 33 cents, from $62.86 to $62.53, according to PG&E. Households that use 750 kilowatt hours a month will see a drop from $104.51 to $100.80.

Overall, PG&E system wide average rates will drop from 13.9 cents per kilowatt-hour to 12.8 cents.

The cut is retroactive to Jan. 1, and PG&E and regulators are still discussing how to account for January and February, but it's expected that there will be an additional, one-time refund in May.

Intel Backs a More-Efficient PC Power Supply

New Design Could Reduce Computer's Needed Energy By A Third, At A Cost Of $10

WSJ Feb. 26

Intel Corp. is backing a new type of more efficient power supply for personal computers, in a move that supporters say could shave $1 billion from U.S. energy bills while reducing emissions from power plants.

The Santa Clara, Calif., chip company today is expected to disclose a new specification for power supplies developed in collaboration with the Natural Resources Defense Council, an environmental group. Intel says four power-supply makers have agreed to use the design, which could cut PC power consumption by one-third.

One drawback: The new power supplies are more expensive and will add an estimated $10 to the cost of a computer. But Intel and the NRDC say the improved efficiency will cut the electricity cost for a typical business PC by $17 a year.

Intel and the NRDC are working with the Environmental Protection Agency to incorporate the new power-supply design into requirements for the EPA's "Energy Star" label, which denotes efficient computers and other electronic products. Intel officials say the new power supplies can be made smaller, allowing for more-innovative PC designs.

Some PC manufacturers indicated they are likely to support the specification. "This is definitely something we would be interested in, because we know we could pass the cost benefits on to customers, as well as the environmental benefits," said Bryant Hilton, a spokesman for Dell Inc., Round Rock, Texas.

The move is the latest initiative by the computer industry to improve its environmental image. Once trumpeted as a "clean" industry, high-tech manufacturers are finding themselves in environmental disputes about issues ranging from the toxicity of chemicals used in their factories to the disposal of old computers. Prodded initially by the European Union, and more

recently by some U.S. states, computer makers have expanded recycling programs and eliminated lead-based solder from their machines.

"From my viewpoint, it seems like industry is making a lot of the right moves," said Craig Hershberg, manager of the EPA's Energy Star program, begun about a decade ago as a green labeling program for electronic appliances.

Intel is the dominant maker of microprocessors, the so-called brains of a PC. But it also exercises great influence over the design of other components inside PCs. The power specification takes aim at one of the most inefficient parts of the computer. Current PC power supplies typically use less than half the electricity that comes into the computer from the wall socket. The remaining power is converted into heat that requires cooling fans to dissipate.

In 2002, the NRDC said in a report that improved efficiency in PCs could cut U.S. electricity consumption by 1% to 2%.

Intel began studying more-efficient power supplies as a way to shrink the size of computers, said Dave Perchlik, Intel's engineering manager for desktop power. Mr. Perchlik said NRDC scientists pointed out the environmental savings as well. According to the NRDC, the more-efficient power supplies would save enough electricity annually to meet the needs of a city the size of Chicago, reducing power-plant emissions by the equivalent of 1.3 million cars.

EPA officials, meanwhile, said they are likely to incorporate the more-efficient power supplies into the Energy Star requirements. Until now, the only requirement for computers to win the Energy Star rating was for a power-saving "sleep" mode when the computer wasn't used for long periods. Intel officials say the designation could spur adoption of the new power supplies, because all PCs bought by the federal government have to be Energy Star-certified.

Car Makers Split Over Timing of Hydrogen-Powered Vehicles

WSJ, Feb. 26

Advocates of a hydrogen-powered future -- when cars run on nonpolluting fuel cells -- liken their vision to shooting for the moon. Now some environmentalists and auto makers are talking up a less ambitious, and less clean, half-step: cars that burn hydrogen in fairly conventional internal-combustion engines.

Fuel cells are widely seen as the ultimate clean-car technology because they convert hydrogen into electricity to power electric motors, and emit nothing but clean water. But realizing that goal is a long way off. This month, the National Academy of Sciences issued a report calling a Bush administration plan to spend $1.7 billion on hydrogen research over five years "unrealistically aggressive," saying a full transformation by the U.S. to hydrogen from gasoline could take until 2050.

Concerns over that long timetable have split the auto industry. Some car makers, prompted in part by California clean-air regulators, want to convert some of today's engines so they can burn hydrogen instead of gasoline. Germany's Bayerische Motoren Werke AG says it plans within two or three years to roll out several hundred of its top-of- the-line 7-series sedans with modified engines that burn both hydrogen and gasoline. Ford Motor Co. is considering building a demonstration fleet of cars that use hydrogen in internal-combustion engines. These car makers say this half-step would get hydrogen-powered vehicles on the road sooner and

ease the transition to the cleaner fuel, in part by prompting the oil industry to sell hydrogen at gas stations.

Others, principally General Motors Corp., say the industry should wait until fuel cells are ready. Armed with a new study by a federal laboratory, GM argues that burning hydrogen in converted auto engines actually could be worse for the environment than today's vehicles, in part due to the pollution caused by making the hydrogen fuel.

The soon-to-be-released study by Argonne National Laboratory -- bankrolled by GM and some major oil companies -- finds that cracking hydrogen molecules from natural gas, and then compressing the gaseous hydrogen so it can fit into a tank on a vehicle, actually emits larger quantities of two problematic air pollutants than refining gasoline does: soot particles, which have been linked to respiratory disease, and nitrogen oxide, which helps form smog.

Then there's the pollution created when the hydrogen is burned in an internal-combustion engine. Based on GM's projections of emission levels from a full-size pickup, the study concludes the truck would cough out about the same amount of nitrogen oxide and soot whether it's burning hydrogen or gasoline.

The upshot: At least until hydrogen can be produced cleanly from renewable energy sources such as the sun or wind -- a process that today is hugely expensive -- hydrogen-burning cars will be a dirtier option than gasoline-burning cars.

Michael Wang, an Argonne scientist who worked on the study, says he did a double take when he saw the results. "I had to go back, step by step, and check my sources," he says.

GM says it hopes to be selling "commercially viable" fuel-cell vehicles by 2010, that it and isn't working on hydrogen-burning internal-combustion vehicles in the meantime.

Many environmentalists have criticized talk of hydrogen-powered cars as a smokescreen by industry to avoid building vehicles that go farther on a gallon of gasoline. Some cite the Argonne study as fresh evidence for such concern. "The Argonne scientists are warning us as plainly as they can not to confuse real solutions with wishful thinking," says Jay Gourley of the Public Education Center, a Washington-based environmental advocacy group.

The staunchest proponents of burning hydrogen in modified engines are in California, the environmental bellwether. Regulators there have amended a state rule requiring the auto industry to build some "zero- emission" vehicles to give the industry partial credit for cars that burn hydrogen in internal-combustion engines. Gov. Arnold Schwarzenegger has announced plans to build a network of hydrogen- fueling stations -- and to convert one of his own gas-guzzling Hummers to hydrogen.

Modifying a car to burn hydrogen involves several steps. One is to add a special fuel tank and fuel hose that can withstand the high pressure at which hydrogen must be stored. Another is to redesign the component that mixes fuel and air and sends it into the engine's cylinders.

Officials at BMW and Ford, as well as at the California Air Resources Board, the state's clean-air cop, downplay the Argonne study. They concede that burning hydrogen in an internal-combustion engine is far less efficient at producing power than running the hydrogen through a fuel cell. But they say the auto industry could make hydrogen-burning cars a lot cleaner than GM assumes. And they suggest the conclusions of the GM-funded study are predictable given GM's distaste for any hydrogen technology short of the fuel cell.

Jerry Martin, a spokesman for the California air board, says vehicles with internal-combustion engines that burn hydrogen won't get any credit under the state's zero-emission-vehicle rule unless they achieve extremely low emissions -- levels below what the Argonne study assumed was feasible for GM's full-size pickup.

Christoph Huss, BMW's senior vice president for science and traffic policy, says his company thinks hitting the California clear-air target is feasible with its hydrogen-fueled 7-series sedans. BMW, in fact, regards internal-combustion engines as the most viable format for hydrogen cars "for the next 20 years," he says. "Maybe BMW is the single company that has done these R&D [research and development] programs," he adds.

At Ford, Gerhard Schmidt, vice president for research and advanced engineering, expresses similar doubts about the Argonne findings. "These studies have a lot of assumptions -- especially when people are not running hydrogen internal-combustion engines like we're doing," he says.

As for the pollution that comes from producing hydrogen fuel from natural gas, even critics of the Argonne study acknowledge it's a problem. But they say that, to build an economic case for producing truly clean hydrogen from renewable sources, it's a price worth paying.

Wednesday March 10, 2004

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 3/9): 44,320 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C:	$39.9-42.5 per MWh, Ave. = $40.7
• Approximate change from previous week	$+1.3 per MWh
• "Normal" price range, before 5/00	$20-$40 per MWh
• Petroleum, West Texas Intermediate:	$37.08 per barrel (year ago: $37.75)
• Seattle gasoline price (3/10)	$1.84 per gallon (year ago $1.87),
• Natural gas, Sumas Hub:	$4.80 per million British Thermal Units (year ago $5.45)
• Approximate change from last week.	Oil: +1.75 $ per barrel; Nat. gas: +0.38 $ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
  - A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
  - A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
  - Most recent rotating blackouts: Tuesday, May 8, 2001

- Energy News Headlines from around the Nation
  - Throttle on Northwest power use wide open (Seattle PI, Mar 10)
  - Dams more valuable than fish (Seattle PI, Mar 4)
  - Power Council projects energy surpluses (Seattle PI, Mar 3)

4. River and Snowpack Information (Updated: Mar. 10, 2004)

- Observed February stream flow at The Dalles: 81.8% of average,
- Observed February precipitation above The Dalles: 69% of average,
- Observed snow pack, early February: 101% of average,
- Estimated Jan.-July runoff at The Dalles: 92.9 MAF, 87% of normal,
- Federal hydropower generation in February: 7,174 aMW, 1995-2002 average: 10,329 aMW.

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6. Power Exchanged: (Updated: Mar. 10, 2004)

- Average flow of power during the last 30 days

o California (exported to)	1,611 MW
o Canada (exported to)	605 MW
o Net power export:	2,216 MW

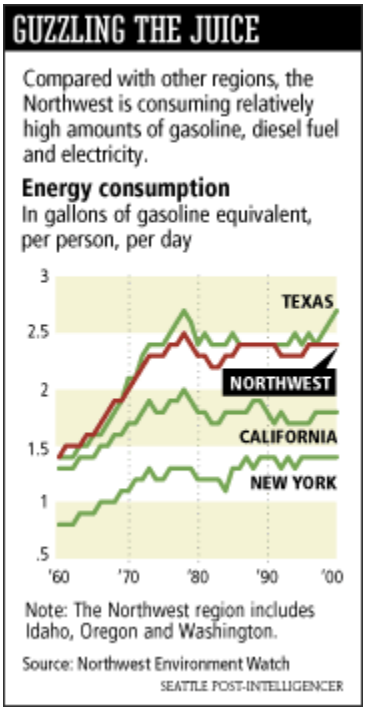
Throttle on Northwest power use wide open

We're not as green as we'd like to think, report finds

By Robert McClure
SEATTLE POST-INTELLIGENCER, Mar. 12, 2004

Despite our eco-conscious image, Northwesterners are pretty big energy hogs -- above the national average in using gas and electricity, and not all that far behind those pickup-driving, oil-drilling Texans.

At the same time, the Pacific Northwest has failed to aggressively pursue environmentally friendly forms of energy -- even while our life spans are increasing, our economic well-being is stagnant, forests have been clearcut at a generous clip and urban sprawl continues, albeit at a slower pace.



These are some of the findings of the "Cascadia Scorecard" report being released today by Northwest Environment Watch, a Seattle think tank that spent three years crunching numbers to get an overall look at the region's quality of life.

The results are a mixed bag, but many indicators appear to be improving, the authors concluded. And there are examples within Cascadia -- the region defined as Washington, Oregon, Idaho and British Columbia -- and around the world that people can seek out as blueprints for improvement.

"There's an old adage in business that what gets measured gets fixed," said Clark Williams-Derry, a primary author. The report, he said, is a tool to help build here "a way of life that can last, where the human economy is reconciled with the natural systems that support it -- where people are doing fine and nature is, too."

Measuring success, the authors argue, means asking: Are Northwesterners living longer, healthier lives? Building stronger communities? Repairing the Earth? The answers: Yes. In some ways. Not all the time.

Northwesterners number among the longest-living people on the planet. If British Columbia were a nation of its own, its residents' 80.7 average years of living would be second globally only to Japan. The Northwest as a whole would come out eighth.

We're living longer than ever -- an average of 79 years. That's up three years in the last 20 years alone -- even though Northwesterners spend less on health care than other Americans.

At the other end of the scale, Northwesterners are power pigs.

"Despite a well-deserved reputation for innovation in energy efficiency ... today's Northwesterners are no more efficient in their energy use than they were two decades ago," the report says.

Automobile fuel consumption declined steeply in the '80s, the report found, but the purchase of more trucks and SUVs since then has put the brakes on that trend.

Fuel efficiency isn't the top concern of shoppers at Chevrolet of Bellevue, said fleet manager Bruce Huskinson. The dealership sells plenty of SUVs, ranging from the Chevy Equinox to the vast Suburban, which gets about 14 mpg.

"When you get to that bigger rig, you're looking for safety and towing capability," Huskinson said. When it comes down to fuel efficiency versus these other features, "you've got to give up one for the other."

Heating homes and the water that's used there accounts for more than half of residential electric consumption in the region. Although dams provide two-thirds of the region's electricity, most new juice generation is coming from burning natural gas and coal.

At Northwesterners' current pace of boosting energy efficiency, it would take 86 years to match what Germany, a world leader, already has done, the authors say.

The news on the energy front isn't all bad. The authors congratulated Seattle City Light, which has pursued a vigorous energy-efficiency campaign and invested heavily in wind power. It also runs its hydroelectric dams in a manner eco-friendly enough to win an environmental award for the way they treat salmon.

It's true that some large wind-energy facilities are being built or are on the drawing boards, but Cascadia could do much better, the authors say.

Kilowatt for kilowatt, Northwesterners over the last three years added 17 times as much generating capacity from natural gas as for wind power -- which comes without gas' pollution and globe-warming properties.

"Cost-effective opportunities for clean-power investments are emerging more quickly than the region is seizing them," the report says.

Then, the authors add in a jab: "Texans, despite their culture of big trucks and oil wells, far outpace Northwesterners in wind-power development."

Helping to fuel the energy consumption, the authors point out, is urban sprawl.

In King County and particularly in Seattle, there has been marked improvement in getting more folks to live in more highly populated urban areas. Almost one-fifth of the new housing permits in Seattle in recent years were for housing in such areas.

The revitalization of Seattle's Belltown is emblematic. Errol Adkins, who's lived in the neighborhood for three years, loves walking everywhere and has even given up his car. He's lost 30 pounds.

"It's cool," said Adkins, 25. "Everything you need is downtown."

While Portland and Eugene started earlier on reining in sprawl, Seattle and Spokane are catching up. The best example is Vancouver, B.C., where nearly two-thirds of the population lives in a compact urban area. In Seattle it's one out of four people.

The authors point out that this may have an effect on some of the health measurements. For example, obesity is one-third less common in British Columbia than elsewhere in the region. One reason, they speculate, is that the Canadians living more heavily in compact, densely settled neighborhoods are walking more.

Forests are another place where such choices are being made. The authors carefully examined five forested regions that represent about 15 percent of the region's forested area. They found high rates of clearcutting that appear to have moderated in recent years.

For example, on the Olympic Peninsula, almost 29 percent of the forest -- an area larger than Olympic National Park and five adjacent wilderness areas -- was clearcut between 1971 and 2002.

Our economic prospects could be better, the report says. While economic output has grown by two-thirds and personal income by nearly a quarter since 1990, the scorecard

looked at what the authors call a more telling set of measures: household income, unemployment, and poverty rates.

Under this "economic security" index, Northwest states and British Columbia underperformed their counterparts elsewhere in the two countries, the report says. The poverty rate rose from 9.7 percent to 11 percent in the Northwest states between 1990 and 2002.

The report recommends rethinking economic incentives. For example, instead of taxing paychecks and profit, they ask: Why not tax pollution, urban sprawl and traffic?

"Fund government in a way that repairs a flaw of the marketplace -- the failure of prices to tell the ecological and social truth," the report argues

The authors conclude that by paying attention to the measures that matter, Northwesterners can help the whole country.

"Daunting, complex, systematic, seemingly quixotic, this goal -- harmonizing people and place -- is nonetheless more attainable here than anywhere else on this continent," the authors wrote.

"If Northwesterners can reconcile themselves with their landscapes, they can set an example for the world."

Dams more valuable than fish

By CYRUS NOE
Seattle Post-Intelligencer, Mar. 4, 2004.

The Seattle Post-Intelligencer editorial "Protect salmon if you want dams" (Feb. 22) needs to be seen in a factual and credibility context. Stopping summer spill is important in making salmon recovery more cost effective. As 2004 returns are seen as likely to set even more records, saving money is a logical order of business.

The Northwest Power and Conservation Council is about to report that Bonneville Power Administration salmon costs since 1978 have totaled $6.452 billion. In January, the council heard from BPA, the Corps of Engineers and National Oceanic and Atmospheric Administration's Fisheries on summer spill economics and benefits. The cost is colossal, benefits marginal.

Cost is pegged at $77 million and benefits as a return of 24 more endangered salmon. That's $3 million per listed fish.

How can this be? Juvenile runs in July and August fall off steeply and become a few stragglers by August. There are simply too few summer fish in the river to benefit from spill at the four dams involved.

Bonneville authorized summer spill in 1995 without a biological mandate as a political gesture described by those familiar with the situation as a "sop to the tribes." Summer spill is now institutionalized and benefits assumed rather than demonstrated.

Some call eliminating summer spill a step backward from what the editorial calls "the promises of aggressive salmon protection that, supposedly, can prevent the need to remove any dams." But the BPA-Corps-NOAA study includes a list of protection projects that could be funded as offsets for such summer spill benefits as there are.

The editorial says that while saving money is OK, "The steep increases in electric rates in recent years are the result of the scandalous push for electric deregulation, not environmental remediation."

Facts suggest otherwise. The biggest single rate increase factor has to have been BPA paying $1.5 billion to purchase high-priced power in 2001 to comply with water management provisions in the 2000 NOAA Fisheries Biological Opinion.

The editorial is right to suggest that recovery funding and operations should involve cooperation. But it is wrong to suppose that dam breaching remains a viable trump card solution if lesser remediation turns out not to be aggressive enough. Tearing out dams was also a political gesture as a sop to fish advocates during the last administration.

The Corps of Engineers in a huge study said breaching was without merit. But political operatives insinuated breaching into the Biological Opinion recovery mix after subverting Corps study conclusions.

The truth is that the lower Snake dams with their multiple uses are more valuable to the state and region than salmon runs. But choosing dams or fish is flat-out not an honest option. Record-setting counts of recent years, now continuing, show once and for all that salmon runs can rise toward recovery with dams in place.

Salmon recovery has wide support, as indeed it should. But it's not anti-recovery to point out that the cost of that effort is breathtaking. We know about BPA's $6.452 billion cost since 1978. But there are more millions and even billions of dollars in costs incurred by regional utility systems, federal and state governments, resource industries, businesses and volunteer organizations.

This super-sized recovery enterprise spent much remediation money during years when salmon runs tended to decline, which raises fish management credibility issues. Now that runs are setting records, it's surely a good time to emphasize management accountability on such issues as summer spill.

BPA, the Corps and NOAA's Fisheries have put the summer spill issue in a scientific and factual context. So now federal decision makers should select offsets and put an end to summer spill. To do otherwise would compromise the recovery enterprise's credibility.

Power council projects energy surpluses

By Bill Virgin
SEATTLE POST-INTELLIGENCER, Mar. 3, 2004

The Pacific Northwest should continue to have a surplus of electricity through 2011, and stable wholesale power prices through the end of the decade, according to draft forecasts from the Northwest Power and Conservation Council.

If those forecasts prove to be true it would be good news for a region that was battered with droughts, tight supplies of electricity and soaring prices that clobbered household, business and utility budgets.

The council's draft forecasts, which are to go into a regional power plan later this year, is loaded with caveats and contingencies. Those include water conditions on the Columbia River hydroelectric system, the price and supply of natural gas (which now supplies 15 percent of the region's electricity) and the rate of economic growth and demand for additional power.

The region -- defined as Washington, Oregon, Idaho and western Montana -- currently has an electrical surplus of about 1,000 average megawatts, roughly what it takes to serve a city the size of Seattle. That surplus estimate is based on the low end of average water conditions.

The council report says the surplus resulted from new generating capacity and conservation added in the region following the price spikes of 2000 and 2001, as well as a drop in demand that resulted from the recession.

That surplus in turn should keep prices in check, an accompanying study says. Although a recent increase in natural-gas prices boosted wholesale power rates to about $40 a megawatt-hour, they should stay at that level through the rest of the decade.

Eric Markell, senior vice president for Puget Sound Energy, said the council's projections for natural-gas prices are "probably among the most optimistic out there today." Puget is expecting more natural-gas price increases than the council is, and if gas prices stay where they are or go higher it raises the question "will electricity prices ultimately be forced to follow."

Although the estimate of the size of the power surplus sounds "about right," Markell noted that some of that surplus may prove uneconomic to operate, depending on what happens to gas prices.

The council's study says prices may even decline a bit after 2010 as conservation, coal-fired plants and wind generators are added. It projects an average wholesale price of $36.50 (in 2000 dollars) through 2025.

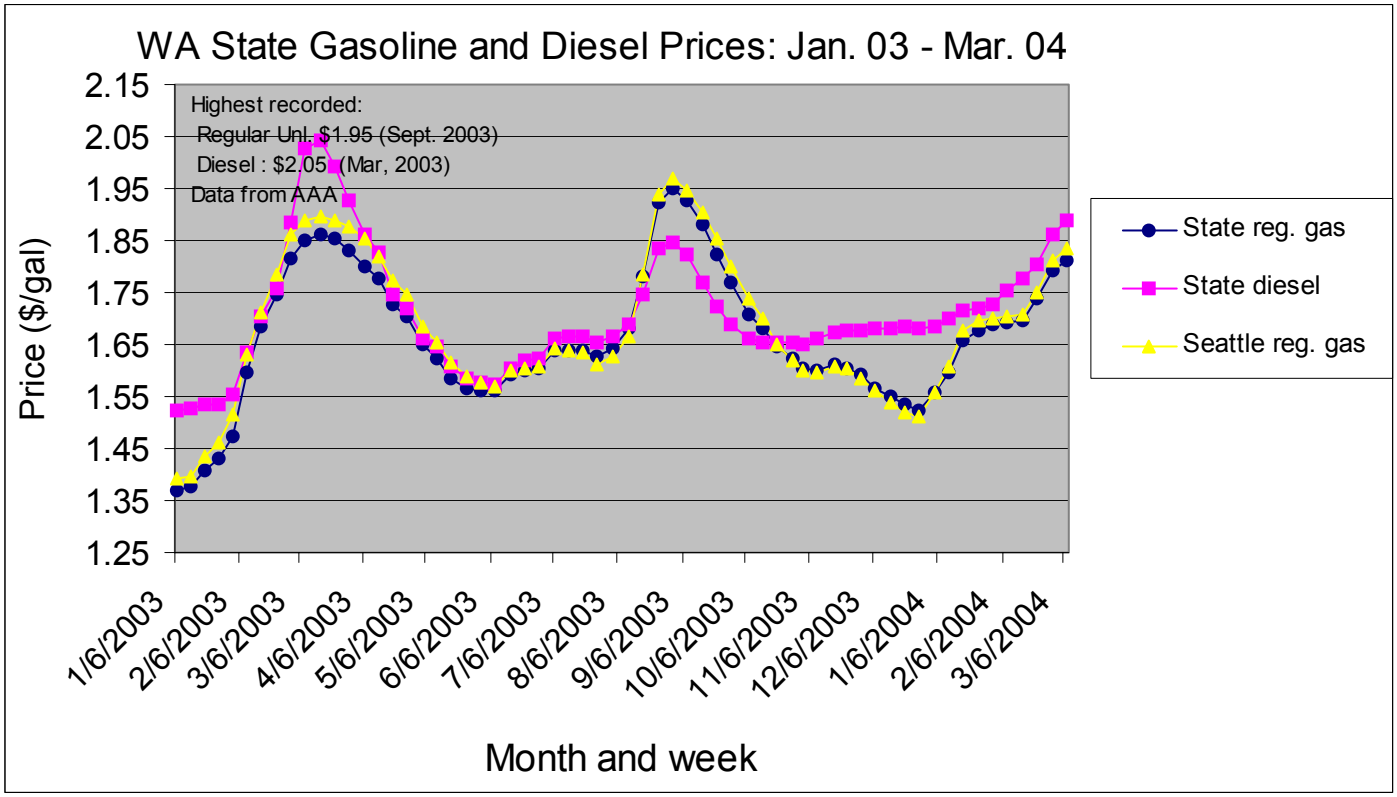
What happens to rates at the retail level depends on such factors as who individual utilities purchase power from and at what price.

Rates will also be affected by contracts between the Bonneville Power Administration, the region's major wholesaler, and its customer utilities.

BPA is involved in disputes and suits with customers over existing contracts, and faces major negotiations for new contracts that would take effect in 2006.

Wednesday March 10, 2004

Gasoline and Diesel prices continue to climb.



Tuesday March 16, 2004

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- Energy News Headlines from around the Nation
  - Delay power deregulation study urges (Sacramento Bee, Mar 16)
  - Oil hits one year high (NYT, Mar 16)
  - Kerry pumping up foreign oil as issue (LA Times, Mar 10)

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- Observed February stream flow at The Dalles: 81.8% of average,
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o Net power export:	2,386 MW

Delay power deregulation, study urges

Carrie Peyton Dahlberg – Sac. Bee, *March 16, 2004*

California should wait until 2009 before it tries to experiment again with a partly deregulated electric market, and even then it should tread carefully to avoid repeating past mistakes, a state study advised the Legislature on Monday.

The study by a planning arm of the state Public Utilities Commission was immediately repudiated by PUC President Michael Peevey, who called it "overly timid" and "a disappointment" in his cover letter to legislators.

Peevey vowed to push the full commission to deal with the issue on "an expedited basis," and outlined his hopes to create a new version of a deregulated market much sooner and for many more customers than the staff study envisioned.

"Rarely have I seen such a clear statement from a regulator that he's made up his mind, and damn the facts, or the absence of any facts," said Bob Finkelstein, executive director of The Utility Reform Network (TURN), a consumer advocacy group.

Peevey's stance drew a rousing "good for him!" from Jan Smutny-Jones, head of the Independent Energy Producers Association, a trade group that represents private power generators.

"There's no doubt that there's hard work to be done, but we shouldn't have to wait for 2009 to get things going," he said.

At stake is the future of how California's biggest industries will buy their electricity, and whether they can have the purchase options they want without pushing higher costs and greater reliability problems onto other customers.

TURN and others have warned that reinstating a partial deregulation could lead to higher bills for residential and small business customers of Pacific Gas and Electric Co. and the state's other regulated utilities.

Utilities are also worried that a badly designed plan could have them signing power contracts or building power plants for customers who then disappear, leaving remaining customers stuck with the bill for the sudden excess supply.

The concept has also become intertwined with the increasingly troubling issue of who is going to build the power plants the state is expected to need sometime between 2006 and 2010 to keep up with growing demand.

Several state lawmakers and Gov. Arnold Schwarzenegger have backed the concept that Peevey is also advancing, often called "core/non-core."

The idea, modeled after the way gas is regulated in California today, would be to keep regulated utility prices for a "core" of smaller customers who generally don't want to be bothered with sizing up competitive offers.

Deregulation would be reserved for the "non-core," considered to be large, sophisticated businesses that are willing to take on added risks of finding alternate supplies in exchange for lower prices.

Supporters, including a number of trade and business groups, argue that such a setup would improve their bottom line and boost the state's economic health.

"A competitive energy market is probably one of the most significant ways the industrial community can reduce their costs these days," said Gino DiCaro of the California Manufacturing and Technology Association.

"Industrial customers saw their rates increase between 50 and 150 percent two years ago," and they have only come down 14 percent since, he said. "It is obvious a competitive market will drive those costs down."

That wasn't obvious at all, though, to those in the PUC's Strategic Planning Division who prepared the new study.

The trouble is, all California utility customers who endured the 2000-01 energy crisis should in fairness keep sharing its ongoing costs, the study said. Those costs include paying off special debt bonds; helping PG&E emerge from bankruptcy; making continuing, above-market payments to a number of independent power plants; and paying for above-market long-term energy contracts lined up by the state during the crisis.

Until the bulk of those long-term contracts begin to expire in 2009, the study said, "the potential for any significant cost savings is minimal."

Some lawmakers and representatives of small consumers fear that while large customers say they want competition, what they're really after is a way to foist those higher costs off on the remaining utility "core" customers as soon as possible.

The 102-page PUC staff report is expected to be far from the last word on the issue. Instead, lawmakers, regulators and others will probably look to it to help frame the ongoing debate. Some have speculated that legislation to outline California's next steps could be passed this year, but others think the issue could take well into 2005 to resolve.

Oil Hits One - Year High

NYT – Reuters, March 16, 2004

Oil prices hit fresh one-year highs on Tuesday as consumers voiced growing concern over the economic repercussions of higher energy costs.

U.S. light crude (CLc1) rose 36 cents to hit a new 12-month peak at $37.80 per barrel, extending strong gains since last week's Madrid bombings fueled concern about further attacks that could disrupt oil supplies. London Brent crude for May delivery (LCOK4) was down eight cents at $32.73.

U.S. prices have jumped 4.5 percent this week as suspicions grew that the militant al Qaeda network was linked to the Madrid bombings last week that killed 201 people.

Supply concerns have gained renewed force as oil cartel OPEC, which controls half the world's crude exports, plans to reduce supplies at a time when Chinese demand is rocketing.

Traders are also on edge over the prospects of a summer gasoline supply crunch in the United States, the world's biggest oil consumer, where fuel inventories are running below normal levels.

A survey of analysts expected U.S. government's Energy Information Administration to report on Wednesday that U.S. crude oil supplies rose 1.2 million barrels last week thanks to strong imports, while gasoline stocks fell 500,000 barrels.

Traders remain concerned that refineries could struggle to build inventories for the peak demand summer season as new environmental regulations restrict supply.

CONSUMER UNEASE

Many economists argue oil prices above $30 a barrel can hold back growth, and consumers worldwide are voicing unease.

The head of Germany's export industry association said on Tuesday that oil prices pose a bigger risk to Germany's economic recovery than the euro's exchange rate,

Anton Boerner, president of the BGA exporters' association, said he expected the oil price to reach between $37-$38 this year, and that prices may even exceed $40.

U.S. light crude prices has averaged almost $35 a barrel so far in 2004, higher than 2003's average price of $31, which was the highest annual average in more than two decades.

``It's shocking," said William Ramsay, deputy executive director of the International Energy Agency, which advises 26 industrialized nations on energy policy.

``There is no fundamental reason. Prices are talked up by politics, stock levels and security concerns. I don't think even OPEC likes to see prices at these levels. It's not in their interest," Ramsay said in Seoul on the sidelines of an oil conference.

OPEC fears world demand will slump after April as rising temperatures after the northern winter reduce demand for heating. The group plans to cut official output quotas to 23.5 million barrels per day from April 1 from 24.5 million bpd.

It has also vowed to cut out production above the self-imposed limits, which Reuters estimated totaled more than 1.5 million bpd in February.

``What is clear is that despite OPEC's extremely high current output levels there is little sign of a large surplus forming in the market just yet," said Barclays Capital in a report.

Kerry Pumping Up Foreign Oil as Issue

■With his crowds angry at surging gas prices, the senator wins cheers with vows to cut dependence.

By Maria L. La Ganga, Los Angeles Times Staff Writer

John F. Kerry's campaign had billed the town hall meeting as a summit on the urban economy. But the woman at Medgar Evers College in Brooklyn had something else on her mind: "Sen. Kerry," she demanded, "what are you going to do about the high price of gasoline?"

"The gas prices are going up, and it's an issue," acknowledged Kerry, before delivering a popular campaign line: "No young American in uniform should ever be held hostage to America's dependence on oil in the Middle East. "

The crowd cheered — it always does, and loudly, when the Democratic presidential hopeful delivers his pitch on politics and petroleum.

With self-service unleaded gasoline averaging $1.74 per gallon nationally — and $2.11 per gallon in California — Kerry plans to make U.S. dependence on foreign oil a major theme of the general

election.

The Massachusetts senator has talked for months about America's heavy energy use and what it means for the environment, the economy and national security — all arguments that seem to resonate more as prices rise with little sign of slowing.

As president, Kerry says, he would promote alternative and renewable energy sources so that by 2020, Americans would be getting 20% of their electricity from those fuels. He also says he would create a $20-billion fund to research new forms of energy.

Democrats think the issue is an area of deep vulnerability for the Bush administration, which has strong ties to the oil and gas industry and led the nation into war with Iraq.

The high price at the pump has been a campaign staple in presidential elections on and off since 1976, when then-President Gerald Ford and his Democratic challenger, Jimmy Carter, grappled with questions about soaring inflation.

This year Democrats have cheered Kerry's proposal that the country pursue alternative sources of energy for environmental and national security reasons. But whether it will be as persuasive with independent and Republican voters remains to be seen.

Kerry isn't proposing any quick solutions that would tamp down the price of gas. But his general message about the U.S. dependency on foreign oil taps into Democrats' suspicions about America's involvement in Iraq, says Stuart Rothenberg, editor of a nonpartisan political newsletter.

Rothenberg thinks Kerry could appeal in the fall to swing voters who feel the pinch of high gas prices.

"The message is right there at the nexus of where economics and war and presidential leadership come together," he said. "It's a good place for Democrats to fight rhetorically."

Republicans, however, say Kerry is being simplistic and negative when he blithely connects blood and oil. And they ask: Why, if he's so worried about foreign energy sources, has he voted against expanded oil exploration within the borders of the United States?

In an e-mail to reporters Tuesday titled "John Kerry: The Raw Deal," the Bush-Cheney campaign noted that Kerry voted against exploratory drilling in Alaska's Arctic National Wildlife Refuge seven times. "John Kerry is relying on gimmicks to conceal his backward policies of higher taxes, more regulation, higher healthcare costs and higher energy costs," Bush campaign spokesman Steve Schmidt said.

Such early and angry sparring between the Bush and Kerry camps portends a long and nasty general election campaign. Kerry spokesman David Wade says the dependence on foreign oil will be a key element of it.

When Kerry declares that he would never send Americans to fight for oil in the Middle East, he says he's highlighting his belief that the nation's dependence on oil in an unstable region puts it in a

precarious position.

Kerry contends that the Persian Gulf War in 1991 was largely about protecting America's access to oil. While he argues that the war in Iraq is misguided, he voted to give Bush authority to take America into combat. And he doesn't believe the conflict there involves oil.

But there is enough nuance in his argument so that other people see a connection.

"I have a son that's turning 17 next month," said Cynthia Adams of Novato, Calif. "Why should my son go to war for oil? Why aren't there wind farms on every hilltop in the state so we can get away from all this oil?"

During the primary season, voters who heard Kerry speak said the country's dependence on foreign oil was an issue that touched their hearts and their wallets.

Oil is "the basis of Bush's policy toward Iraq," insists Phil Palen, a retired real estate agent who describes himself as an independent and who heard Kerry speak recently in Buffalo. "I'd love to see a commitment of moving toward hydrogen-based fuel. It's not polluting, and you'll never run out of it."

But while some voters think the current combat in Iraq is in part an effort to defend U.S. access to oil, Phyllis Bennis, an oil expert and fellow at the Institute for Policy Studies in Washington, D.C. said, "You have to parse that against the facts.

"We don't get most of our oil from the Middle East. We don't even get most of our foreign oil from the Middle East," she said.

While Kerry regularly points out that Saudi Arabia has 46% of global oil reserves, according to the U.S. Office of Transportation Technologies, that nation is only the No. 2 exporter of oil to America. The top importer? Canada.

Of the top 10 countries from which the United States imports oil, only three are Arab nations.

Neither Kerry's proposals nor the Bush administration's energy policies would end U.S. dependence on foreign oil, says Mark Baxter, director of the Maguire Energy Institute at Southern Methodist University. Even if, as the Democratic candidate suggests, 20% of the nation's electricity could come from alternative sources by 2020, that does not account for the other 80%, Baxter says.

"We will always be dependent on" foreign oil, Baxter said. "We don't like it. We especially don't like it now that oil is $30 a barrel."

Kerry said in a recent interview that he thought people responded strongly to his message, in part, because they understood that oil was a finite resource and that American security was impaired by reliance on it.

"That black stuff is hurting us," he said. "It hurts our health. It costs us unbelievable security

disadvantages. It's contributing to global warming. Twenty-five percent of the kids in Harlem have asthma because that's the alternative truck route. We can't live like this."

At a town hall meeting Tuesday in Evanston, Ill., Kerry repeated his spiel about oil and national security, and he was quizzed again about spiking prices at the pump.

Mike Cichowicz, a 50-year-old musician and TV producer, told Kerry that he was worried about the rising price of gasoline.

"What can be done to create a transparency about oil industry's profits that are occurring during this time?" Cichowicz asked. "What can be done, and what would you do as president to reduce the prices so we can all drive again?"

The Bush administration has sought to drill for oil in the Alaska refuge to increase the nation's ability to provide energy domestically.

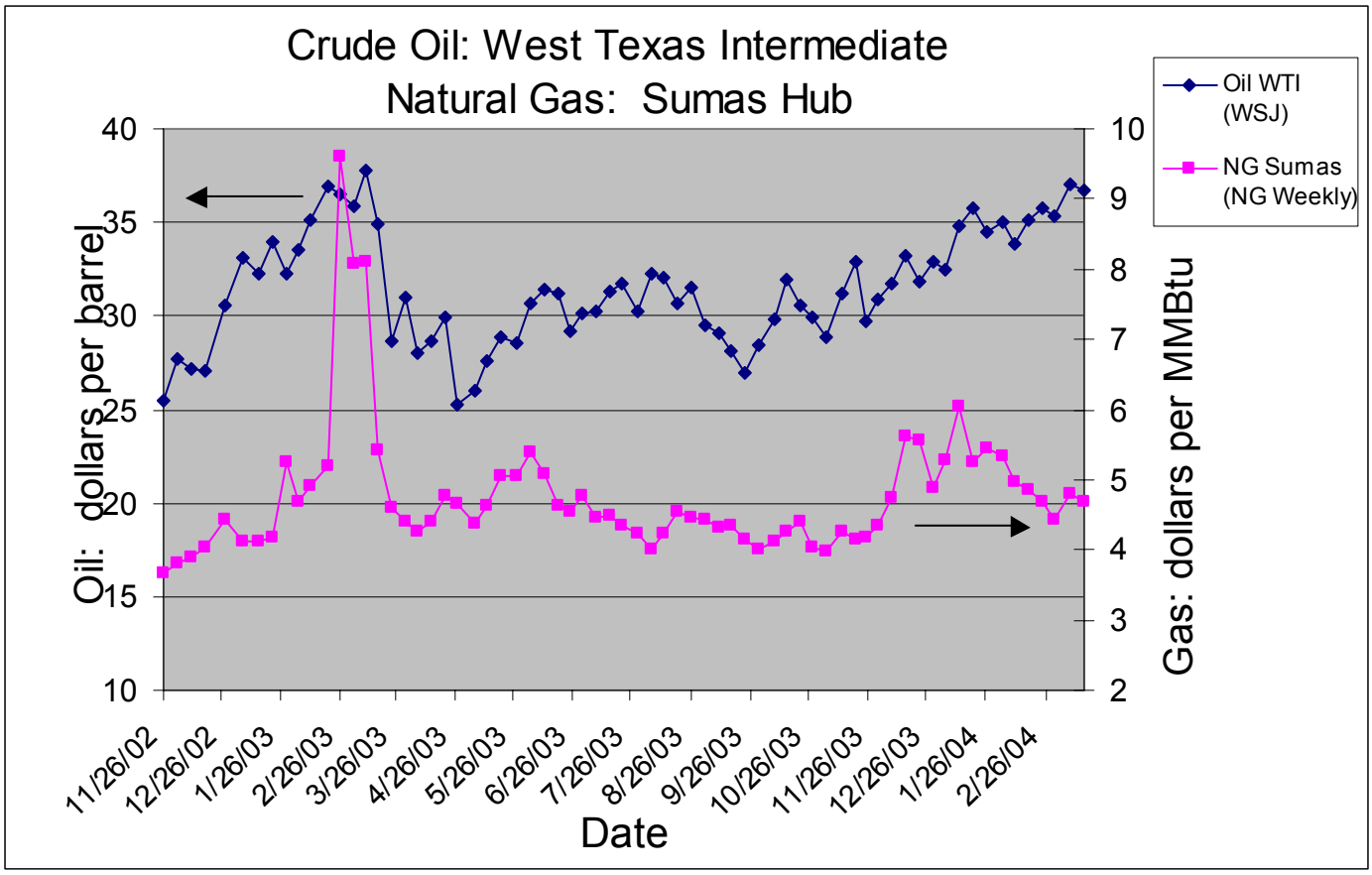
Kerry has voted against it, citing the negative environmental impact.

"He has time and time again voted against increased oil exploration," said Schmidt, the Bush campaign spokesman. "He's opposed the energy bill didn't even show up to vote on the final passage of the energy bill."

"Why did he vote against" drilling in the refuge? asked Wade, Kerry's spokesman. "Because it was a joke and wouldn't have made a dime's worth of difference to our dependency."

Tuesday March 16, 2004

Crude oil price remain high, keeping gasoline, diesel and jet fuel prices at or near historical highs, and probably puts modest upward pressure on natural gas prices.



Tuesday March 23, 2004

Weekly Energy Status Report

1. Northwest Power Pool Status (WA, OR, ID, MT, WY, UT, No. NV, BC, AB)

- Power Pool peak load (Tuesday, 3/22): 42,253 MW
- Reserve margins were within comfortable ranges for Northwest Power Pool utilities.

2. Electricity, Petroleum and Natural Gas Prices

• Weekly Range at Mid-C:	$36.5- 39.6 per MWh, Ave. = $38.7
• Approximate change from previous week	$-0.1 per MWh
• "Normal" price range, before 5/00	$20-$40 per MWh
• Petroleum, West Texas Intermediate:	$37.13 per barrel (year ago: $37.75)
• Seattle gasoline price (3/22)	$1.84 per gallon (year ago $1.87),
• Natural gas, Sumas Hub:	$4.78 per million British Thermal Units (year ago $5.45)
• Approximate change from last week.	Oil: +0.40 $ per barrel; Nat. gas: +0.09 $ per MMBtu

3. California Electricity Situation

- CA ISO Alert Status
  - 20 minute outage in So. Calif. on March 8, 2004 due to operator error.
  - A stage 1 alert (7% reserve margin) was declared on May 28, 2003.
  - A stage 2 alert (5% reserve margin) was declared on July 10, 2002.
  - Most recent rotating blackouts: Tuesday, May 8, 2001

- Energy News Headlines from around the Nation
  - California legislators revisit partial deregulation of power industry (San Diego Trib., Mar 21)
  - State gives aluminum industry a tax break (Seattle PI, Mar 19)
  - Insurers warn of global warming catastrophe (Reuters, Mar 8)

4. River and Snowpack Information (Updated: Mar. 23, 2004)

- Observed February stream flow at The Dalles: 81.8% of average,
- Observed February precipitation above The Dalles: 69% of average,
- Observed snow pack, early February: 101% of average,
- Estimated Jan.-July runoff at The Dalles: 92 MAF, 86% of normal,
- Federal hydropower generation in February: 7,174 aMW, 1995-2002 average: 10,329 aMW.

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- **State Agencies:** From Oct thru Dec 2003 electrical usage was 9 % less and natural gas usage was 21.3% less compared to the same period in 2000.

6. Power Exchanged: (Updated: Mar. 23, 2004)

- Average flow of power during the last 30 days
  - California (exported to) 1,598 MW
  - Canada (exported to) 1,090 MW
  - Net power export: 2,688 MW

California Legislators Revisit Partial Deregulation of Electricity

The San Diego Union-Tribune - March 21, 2004

Assembly Speaker Fabian Núñez has introduced legislation he says will spark power plant construction and protect small customers.

After spending $50 billion on its botched effort to deregulate electricity markets, California is back to debating the value of loosening power regulation.

To be sure, the blowup of 2000-2001 vaporized public support for complete deregulation.

But under pressure from large electricity users and independent power plant builders, the Legislature is considering several proposals for deregulating up to 30 percent of the state's power market.

Proponents of the partial market loosening are quick to emphasize that their plans would protect most residential and small-business customers with rates and service regulated by the California Public Utilities Commission.

But they propose allowing larger customers to sign contracts with unregulated electric suppliers, so-called direct access agreements.

Lawmakers who support partial deregulation believe that freeing these customers for direct access would provide an incentive to independent energy companies to build badly needed power plants.

And the independent providers, deregulation advocates say, would also provide healthy competition to utilities and drive down rates for all.

Under state law, new unregulated private electricity deals are banned until 2013. That's when the last of the overpriced electricity contracts signed by California during the crisis expire.

Legislators feared that allowing large power users to make cheap power deals would burden those who pay for crisis costs as part of their monthly utility bills.

But state law allows direct access deals signed before the ban to continue.

Within San Diego Gas & Electric's territory, for example, about 18 percent of the electricity is provided under these unregulated contracts.

Those direct access customers are supposed to pay exit fees to cover their share of crisis costs, but those costs are capped and have not been fully paid.

Advocates of partial deregulation -- known in industry jargon as a core/non-core market structure -- promise that their new plans wouldn't allow big customers to escape their share of crisis costs or the overhead of maintaining the state transmission and distribution system.

"My first objective is to protect core customers," said Assembly Speaker Fabian Nunez, D-Los Angeles, sponsor of the most recent partial deregulation bill.

But the assurances from Nunez and others fail to mollify consumer advocates.

They liken guarantees of consumer protection under partial deregulation as akin to assurances of being careful about unprotected sex.

Allowing partial deregulation, they say, is bound to save big customers money at the expense of smaller customers.

"I don't believe you can prevent cost shifting," said Michael Florio, senior attorney for The Utility Reform Network, a consumer advocacy group in San Francisco.

He says that polls show overwhelming public support for full regulation of the electric industry, similar to the type in place for most of the last century. But there's little evidence of that sentiment in the Legislature.

The strongest evidence of the renewed tilt to partial deregulation is the fact that the latest proposal comes from the Assembly speaker himself.

Nunez says he's concerned about projections of tight state electricity supply as soon as 2006 and he's sensitive to complaints from utilities that the regulatory environment is so unstable they can't safely invest in new plants.

During the deregulation experiment, it was assumed that market forces would create incentive for new power plant construction, so utilities were relieved of their obligation to plan and provide adequate electricity supplies.

The PUC has since reversed course and reaffirmed the utilities' responsibility to ensure reliable service. But utility executives say they have difficulty obtaining financing in the current environment, with lenders fearing changes that could affect the ability to repay loans.

Financing problems Independent energy companies, meanwhile, say they face the same financing problem and add that recent PUC rulings leave them at a disadvantage in competing with utilities in plant building.

Large power users, for their part, believe they could get cheaper power deals if they were freed from the requirement of getting service from their local utilities.

Nunez's bill, AB 2006, would allow the 30 percent of the market that includes larger power consumers to sign supply contracts with unregulated electricity suppliers. Smaller customers would remain protected by the PUC, he says.

The bill, which Nunez acknowledges Southern California Edison played a significant role in crafting, guarantees that utilities can recover their plant building costs and earn profits on their investments. That should offer reassurance to lenders that utility construction loans will be repaid.

But the speaker also emphasized that under AB 2006, utilities would compete against independent energy providers for the right to build new power plants.

"If utilities can assure the PUC that the investment they make in building a generating plant is more cost-effective, they will have a leg up," said Nunez.

To assure a stable power market and allow for prudent planning by utilities, AB 2006 would require that large customers who retain local utility electricity service give five years notice of plans to depart for a private, unregulated supplier.

John Bryson, chief executive of Edison International, parent of Southern California Edison, says that provision and others within AB 2006 would provide the stability missing in the current environment, which is now largely determined by decisions from the five-member PUC.

Risks cited "In the absence of a longer-term, more-predictable environment, there are risks," said Bryson, himself a former commission member.

Chief among those risks, he said, is a lack of investment in new plants and transmission lines.

"What we see at the PUC is that decisions made by one commission can't bind future commissions," he said.

To further stabilize the "investment climate," a term favored by proponents, AB 2006 would narrow the PUC's traditional latitude to revise decisions as projects proceed.

Supporters of regulation say that involves a significant reduction of the commission's regulatory clout.

"I would not want to curtail the PUC's discretion in matters of cost recovery," said state Sen. Joseph Dunn, D-Garden Grove. His own bill -- now stalled in the Legislature -- would continue the ban on private power deals and move back to re-regulation of the electricity industry.

Assemblyman Keith Richman, R-Chatsworth, author of a competing measure for partial deregulation, says the Nunez bill is too protective of utilities in another sense. He says the bill excessively protects utilities from competition with independent power suppliers, who might develop electricity generating plants at lower cost.

In particular, Richman says, the five-year notice requirement for seeking a private power deal is far too long.

"We think a notice period of six months to one year is appropriate," said Richman.

Persistently high power rates, meanwhile, remain a drag on consumers and businesses.

A major factor Dorothy Rothrock, a vice president with the California Manufacturing & Technology Association, said high power costs have been a contributing factor in the state's steep loss of manufacturing jobs over the past three years.

But Dunn says deregulation isn't an answer because it will simply shift costs to smaller power users.

He and consumer advocates say large users want private deals precisely because it gets them out from under the high costs that all now bear as a result of the market meltdown during the last deregulation attempt, as well as the high overhead costs needed to ensure adequate reserves.

Dunn says all deregulation efforts face an uphill battle in the Legislature. With limited prospects for legislative action, he says, the debate could shift to the ballot box by November.

Edison could try a ballot initiative should its bill fail in the Legislature, he said, although an Edison spokeswoman says no initiative measure is now planned.

Dunn added that advocates of electricity re-regulation are considering an initiative of their own, though costs are daunting.

"The polls say it would pass overwhelmingly, but getting the resources together is difficult," Dunn said. "Just gathering the signatures to get it on the ballot will require $3 million to $5 million. And the proponents of a re-regulation measure would have to be able to put at least $10 million on the table because the resources in opposition would unite and spend at least $50 million."

But deregulation opponents say they have a higher level of resolve than ever before.

"We are a lot smarter than we were back in the 1990s when deregulation was just a theory and had a lot of pizzazz to it," said Florio of TURN. "Everyone who was skeptical of deregulation in 1995 realizes we have to fight and not let this happen again."

State gives aluminum industry a tax break

Smelters say they also need lower power rates

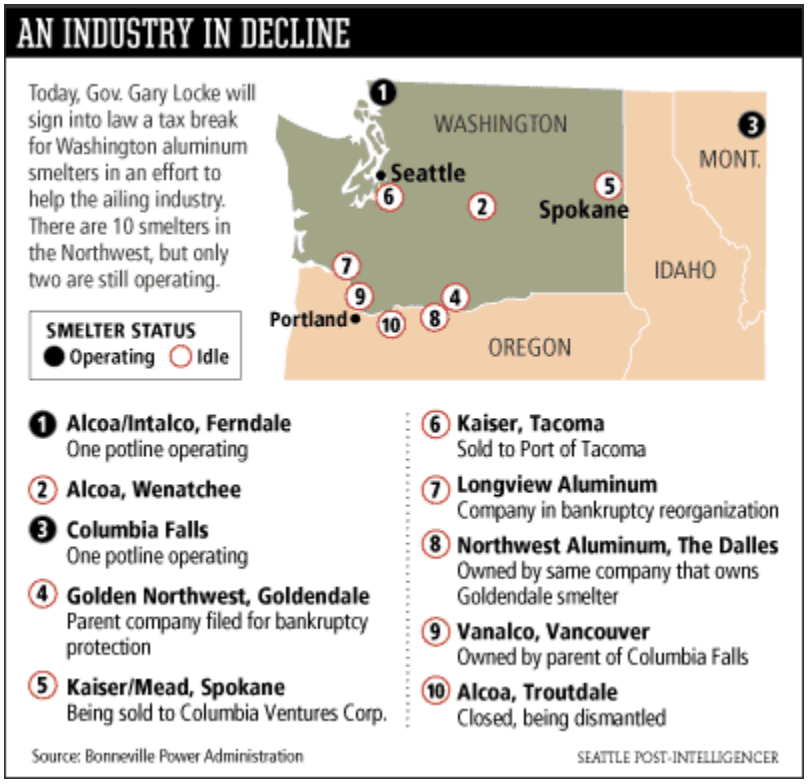
By Bill Virgin, SEATTLE POST-INTELLIGENCER, Mar. 19, 2004

The beleaguered aluminum industry gets a tax break with the signing of legislation today by Gov. Gary Locke, but there's not much of an industry left to take advantage of it.

Two plant managers for Alcoa Inc., which operates two smelters in the state, say the tax breaks will be useful as a short-term relief while the industry and the region work out how much power aluminum producers will be able to buy starting in 2006 -- and at what price.

Cutting the business and occupation tax on aluminum smelters from .484 percent to .2904 percent through 2006 "provides a bridge," said Bob Wilt, manager of Alcoa's Wenatchee plant.

But getting relief on power rates is crucial, added Mike Rousseau, manager of Alcoa's smelter at Ferndale, where Locke will sign the legislation today. "We've got to work hard to convince (the Bonneville Power Administration) to roll back some of these rates," he said.



Of the 10 smelters in the Pacific Northwest that existed at the start of the decade, only two are operating, and those at reduced capacity. Only one of the two operating is in Washington -- Alcoa's Ferndale smelter.

Some smelting capacity is gone for good -- the Port of Tacoma bought Kaiser Aluminum's Tacoma Tideflats smelter and plans to demolish it, and Alcoa is dismantling the former Reynolds smelter in Troutdale, Ore. Three others in the Northwest are owned by companies in bankruptcy proceedings, leaving questions about how much capacity will ever be returned to production.

According to a legislative bill report, the aluminum industry employed more than 5,300 people and had taxable income of $2.4 billion in 1998. By fiscal year 2002, that was down to 2,200 workers and just $700 million.

The Northwest aluminum industry -- which in the late 1990s accounted for 39 percent of the aluminum produced in the United States -- was clobbered by a combination of low metal prices and soaring power rates, the latter a result of the West Coast power crunch. With BPA scrambling to find power and raising its rates, smelters chose to sell power back to Bonneville and suspend operations.

Alcoa's Wenatchee plant has an advantage in that it gets 40 percent of its power supply from Chelan Public Utility District, and the bill removes a utility tax on those purchases, Wilt said. But to be able to reopen capacity there, the plant needs a long-term answer on its power contracts, as well as adjustments in its contracts with labor unions (which Wilt thanked for supporting the bill).

The two Alcoa plants have about 400 employees each; at one time, the Intalco plant had 1,200 employees. Because the Wenatchee plant isn't making any metal at the moment, employees there are doing maintenance in anticipation of a restart, as well as community service work.

BPA is due to begin discussions soon on power sales contracts with customers and major utilities to replace agreements expiring in 2006. Aside from the question of rates, the aluminum industry faces a bigger challenge over what allocation of Bonneville's total portfolio it will get. Some contend the industry ought to fend for itself on the open market.

"That's where our energy is going to be focused, to make sure that doesn't happen," Rousseau said.

"We need this power to keep those jobs."

Insurer warns of global warming catastrophe

By Thomas Atkins, Reuters, Mar. 3, 2004

The world's second-largest reinsurer Swiss Re warns that the costs of global warming threaten to spiral out of control, forcing the human race into a catastrophe of its own making.

In a report revealing how climate change is rising on the corporate agenda, Swiss Re said the economic costs of global warming threatened to double to $150 billion (81 billion pounds) a year in 10 years, hitting insurers with $30-40 billion in claims, or the equivalent of one World Trade Centre attack annually.

"There is a danger that human intervention will accelerate and intensify natural climate changes to such a point that it will become impossible to adapt our socio-economic systems in time," Swiss Re said in the report.

"The human race can lead itself into this climatic catastrophe -- or it can avert it."

The report comes as a growing number of policy experts warn that the environment is emerging as the security threat of the 21st century, eclipsing terrorism.

Scientists expect global warming to trigger increasingly frequent and violent storms, heat waves, flooding, tornadoes, and cyclones while other areas slip into cold or drought.

"Sea levels will continue to rise, glaciers retreat and snow cover decline," the insurer wrote.

EXPONENTIAL RISE

Losses to insurers from environmental events have risen exponentially over the past 30 years, and are expected to rise even more rapidly still, said Swiss Re climate expert Pamela Heck.

"Scientists tell us that certain extreme events are going to increase in intensity and frequency in the future," Heck told Reuters by telephone. "Climate change is very much in the mind of the insurance industry."

Over the past century, the average global temperature has increased by 0.6 degrees Centigrade, the largest rise for the northern hemisphere in the past 1,000 years, Swiss Re said.

In the short- and medium-term, simply knowing that the planet is warming will allow society to adapt, for example, through infrastructure to cope with more-frequent floods or by instructing farmers to use drought-resistent cereals.

In other cases, governments need to restrict risk-taking, such as approving housing developments in low-lying areas, and improve catastrophe management capabilities.

In the long term, Swiss Re said, greenhouse gases widely thought to trigger global warming will need to be reduced, the use of fossil fuels cut and new energy technologies developed.

"The role of the insurance industry is through establishing risk adequate tariffs and to give the risk taker the opportunity to implement appropriate measures to reduce the chance of possible losses," Heck said.

Wednesday March 30, 2004

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  - Gas prices fuel heat in White House race (WSJ, Mar 30)
  - Energy conservation squeezed (PowerMarketers, Mar 30)
  - Utilities look to coal as gas prices rise (Associated Press, Mar 28)

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Gas Prices Fuel Heat in White House Race; Bush Is Pressed Over Why He Hasn't Done More, but Kerry Is Also on the Defensive

WSJ Mar. 30

With gas prices high and today's OPEC meeting likely to keep them there, President Bush is confronting the politically charged question: Why hasn't he done more to try to hold down oil prices?

The short answer: He is finding, as have presidents before him, that limiting Americans' costs at the pump isn't as easy as the former oilman made it sound when he ran for office four years ago.

As a candidate in 2000, Mr. Bush didn't acknowledge that a president has few tools to influence oil prices. Nor does John Kerry, his likely Democratic rival, do so now. He pounced on the issue yesterday, offering that election-year perennial -- a blueprint for "energy independence. " The Massachusetts senator also called for suspending oil purchases for the government's petroleum reserve, to boost market supplies and nudge prices lower. Mr. Bush, who wants to keep filling the reserve for national emergencies, opposes that.

One of the few presidential tools is diplomacy with the Organization of Petroleum Exporting Countries, primarily Saudi Arabia. Yet, despite White House wishes and Chief of Staff Andrew Card's public admonition last week, the Saudi oil minister stood by a cartel proposal to cut production quotas. That could squeeze supplies and force up prices -- though many doubt actual production will fall, given OPEC members' persistent cheating.

Mr. Card's words, which may have caused a momentary price dip, were relatively rare for the administration. While Mr. Bush promised in 2000 that he would "jawbone OPEC" and exploit his "political capital" in the Middle East as the son of a president who liberated Kuwait, he is also a free-market Republican and an oil-patch veteran himself, and averse to overt intervention in oil markets.

Mr. Kerry offers no quick fixes, either, and he is on the defensive for other reasons. Republicans are pummeling him for 11 years ago speaking favorably of a 50-cents-a gallon gasoline tax for deficit reduction, and for more recently espousing higher fuel-efficiency standards for automobiles. Both are anathema to automakers and union workers in the swing states of Michigan and Ohio.

In his plan yesterday, Mr. Kerry promised energy independence in a decade, although incentives for hydrogen-based fuel, wind and solar power probably would take several decades to have effect, analysts say. Missing was a specific proposal, which he featured earlier in the campaign, to raise automakers' fuel-efficiency standards for passenger-car fleets to an average 36 miles-per-gallon by 2015, from 27.5 mpg now, for an estimated savings of two million barrels of oil daily.

For Mr. Bush, an array of factors have fundamentally limited his ability to influence pricing, globally and at home. Mideast turmoil and tension with the Saudis over fighting terrorism have weakened the U.S. muscle to coax more supplies from the region. With foreign oil valued in dollars, a weak dollar has caused producer states' real income to fall; they have argued they must keep prices up to compensate. OPEC members already are pumping oil at or near capacity.

Venezuela continues to be hobbled by political unrest and industry shutdowns. China and other industrializing nations are guzzling more oil.

Given a president's dearth of policy tools, the most significant option is simply jawboning. New Mexico Gov. Bill Richardson, formerly President Clinton's energy secretary, did a lot of that with OPEC. "They didn't like it, but I'm convinced it had an effect," he says. Lately, he adds, "OPEC has been running rampant with supply reductions and price increases. It comes at no cost to them because this administration doesn't scream about it."

But a number of analysts criticized Mr. Richardson. "He'd call OPEC ministers on their cell phones while they were in meetings. He was too obvious and too public. It backfired badly," says Vahan Zanoyan, the head of consulting firm PFC Energy.

Yet Mr. Bush arguably has gone too far in the other direction, analysts suggest. Bush Energy Secretary Spencer Abraham had no comment to Gov. Richardson's criticisms, said a spokesman. He instead referred to an Abraham speech to an oil group last May, which the secretary defined the Bush approach as "quiet diplomacy."

The U.S. has its own problems with supply. Domestic refining capacity is tight, while new environmental regulations calling for much lower sulfur content have caused gasoline imports to drop by a third. The outlook: a summer of price increases -- just as Americans are gassing their cars for vacations.

Despite various claims that Americans' gas prices are at a record, they are well short of an all-time high when adjusted for inflation of $2.97 a gallon in March 1981. "Gasoline is still a bargain," says Robert Ebel, chief energy analyst for CSIS, an independent research firm.

That isn't an argument either Mr. Bush or Mr. Kerry will be making. "Rising gas prices are one of the most transparent in-your-face hits on the pocketbook there are. I don't think there's any White House that wouldn't see this as a concern," says Gene Sperling, who advises Mr. Kerry.

Democrats are only too happy to exploit Americans' sense of aggrievement at the pump. "It's starting to pop up in focus groups in open-ended questions of 'What concerns you?' " says Democratic strategist Jim Jordan. The issue plays to one of Democrats' central themes: That Mr. Bush, with his ties to industry, and Vice President Cheney, the former Halliburton Corp. chief, are content to sit by while their energy-sector allies benefit.

Mr. Bush and congressional Republicans are quick to note that Democrats in the Senate -- including Mr. Kerry -- continue to block the energy bill that Mr. Cheney fathered. But industry analysts are near unanimous in dismissing that package of energy-production tax incentives as much help in the short or even long term. "It seems to me to have no practical significance," says Roger Kubarych, an analyst at the Council on Foreign Relations.

Energy Conservation Squeezed

PowerMarketers Publications, Mar. 30

By Ken Silverstein

A tug-of-war is underway to get control over America's energy policy. At one end of the spectrum

is the Bush administration that has emphasized more domestic energy exploration and on the other side are many Democrats and environmentalists who want to see dollars poured into energy conservation and alternative fuel sources.

The discrepancies in these positions don't make them mutually exclusive. While promoting the use of fossil fired energy forms may be controversial in some circles, providing incentives to encourage energy conservation seems benign. It's not free and the technologies applied to achieve greater conservation have to be paid for by some entity. But, utilities can get involved by supplying vital information to consumers and by providing the means by which residential or commercial customers can participate. The results not only could lead to lower energy bills but also could reduce power plant emissions.

“This (demand response) program performed exceptionally well since the summer of 2000, and last summer we reduced our peak demand by 3.5 percent,” says Rick Leuthauser, energy efficiency manager for MidAmerican Energy that has 125 commercial and industrial customers enrolled. A demand response program allows utilities to interface with energy users to reduce peak demand. That cuts down on the need to run higher-cost generation or to purchase additional power at costly spot market prices. Participants are notified of an impending curtailment by phone or e-mail.

Other benefits are also available. A 1998 study by the World Wildlife Fund says that had expenditures tied to utility demand response programs remained at their 1993 peak, then utilities would have avoided releasing 11 million tons of greenhouse gases and 79,000 tons of other pollutants that are regulated under the Clean Air Act. Meanwhile, it says that consumers would have saved $1 billion.

Altogether, the U.S. electric utility industry spent $14.7 billion on demand-side management programs aimed at encouraging their customers to make investments in energy efficiency, according to David Loughran and Jon Kulick in a paper that they recently authored for The Energy Journal. By 1993, utilities were spending $3.2 billion, or 1.7 percent of their total revenues annually on such programs. Most states allow utilities to earn a rate of return on their demand response investments, which can sometimes cause utilities to distort their successes, they write.

Despite the red flags, green groups and others say that public funds should be established to help utilities create more energy conservation programs. At the same time, a coalition of labor workers, Democrats and environmentalists want the Bush administration to invest $30 billion into energy efficiency and renewable fuels over the next decade. “It's about national security and job creation,” says Rep. Maria Cantwell, D-Wash., who heads the alliance called the Apollo Project. Part of their plan is to force utilities to install the “best available technologies” such as scrubbers on all existing coal-fired power plants.

Smart Buyers

A study by McKinsey Co. found that consumers could save nearly $15 billion annually if all states implemented real-time pricing strategies. The savings would be almost evenly split between the industrial and residential sectors, with the message being that not just big businesses but also residential customers would learn to respond to market forces in the energy segment.

The opposite of such an approach is the common practice whereby customers pay the same rate no matter when they use electricity. Obviously, the costs incurred during peak usage are averaged in with non-peak prices so that consumers are shielded from large price spikes and so that utilities do not lose money. Customers become unresponsive in such situations, using more energy and driving up costs. Consider that the Electric Power Research Institute found that a two percent reduction in energy usage in California in the summer of 2001 would have cut wholesale electricity expenditures by $700 million. Similarly, the Brattle Group said that a 10 percent reduction in peak demand there during the same time period would have reduced wholesale prices by 50 percent.

A traditional way to encourage conservation and to lower energy bills is through insulation and advanced lighting techniques—a time-tested method when electricity prices are stable and businesses or residences can accurately estimate how quickly a payback might occur. But, in some jurisdictions across the country, customers can opt into real-time or time-of-use pricing programs, which is a step beyond energy conservation. Such programs allow users to adjust their usage, for example, from 3 p.m. to 7 p.m. during summer weekdays when the cost of electricity is highest.

If an industrial plant is flexible and can run key machinery at times when the electricity load overall is at its lowest ebb, then it could save a lot of money. Residential customers, on the other hand, would simply choose to run their dishwashers or washing machines in the late evening to avoid being hit with higher costs. Any savings, however, are uncertain. If prices were volatile, diligent homeowners would almost certainly save but if price instability is minimal, an investment in demand response programs may be unfruitful.

ISO New England says that demand response programs would improve reliability and relieve congestion. Specifically, it said that the reduction of 50 megawatts in a congested zone would improve reliability by 30 percent. The threat of rolling blackouts would therefore diminish. Similarly, Allegheny Energy has its own time-of-use program. That service allows customers to set their temperatures by accessing the Internet. Once the air temperature is programmed, a Web site established by Allegheny will send out a signal to a pager module embedded in the thermostat, which responds as if someone was setting the gauge by hand.

"Smarter energy buyers lead to a more efficient energy market," says Ross Malme, CEO of RETX, a meter information company in Atlanta. "If consumers are in tune to the fact that energy prices can have wide variations on an hourly basis, they would be able to identify ways to take advantage of those variations."

Ultimate Question

Success is not certain. Consider that Puget Sound Energy declared its demand response program a disappointment after consumers who had enrolled in the program were found to be paying higher prices than those on traditional billing cycles. Its fate, however, is less a verdict on the technology and more a product of steadier electricity markets and administrative rules that governed the system. It's a process, however, that is expected to be revamped and re-implemented.

To make advanced metering and demand response programs economically attractive to utilities, the House and Senate have both supported tax incentives. Meanwhile, in July 2002, the National Association of Regulatory Utility Commissioners urged state commissioners to explore ways to

move customers into dynamic pricing programs as well as how states might fund such initiatives.

The ultimate question is whether the concept can prove itself in a free market. Demand response programs have brought about some early rewards both economically and environmentally. Clearly, the benefits must be shown to outweigh the costs. And, in an atmosphere clouded by blackouts, market manipulation and price volatility, the case for increased use of such programs is relatively easy to make.

Utilities Look to Coal As Gas Prices Rise

Mar. 28. Associated Press

Coal, spurned for decades by power plant builders, is enjoying something of a renaissance as natural gas prices drive up the cost of generating electricity.

In the West, as well as other parts of the country, utility companies are contemplating new coal-fired electric power plants for the first time since the early 1990s. But the renewed interest in coal, prompted by concerns over the volatility in natural gas prices, is also reviving protests by environmentalists worried because coal pollutes the air.

The shift toward coal coincides with the Environmental Protection Agency's implementation of a regional air pollution plan intended to clear haze lingering over western wilderness areas.

"We haven't seen a coal plant built in Colorado in two decades and there's a reason for that," said Robin Hubbard of Environment Colorado. "Denver just had the dirtiest summer we've had in 18 years. We clearly need to look at other means of power generation."

Utilities turned to natural gas for new power in the 1990s because the plants are cheaper to build and cleaner to operate than those run on coal. But then came the jump in natural gas prices.

Fuel costs for gas-fired plants are as high as 4 cents per kilowatt hour, while coal plants come in at about 1 cent, said Robert McIlvaine of McIlvaine Co., an energy consulting firm in Northfield, Ill.

"The breaking point is somewhere around $3 per million BTUs of natural gas," McIlvaine said. "Below $3, gas-fired generation is more attractive than coal."

A BTU, or British Thermal Unit, is roughly equivalent to the amount of heat generated by burning a kitchen match, according to Xcel Energy spokesman Steve Roalstad.

At the current price of about $5.50 per million BTUs, natural gas is not even close to competitive with coal. Some gas-fired plants around the nation are being shuttered because the cost to run them equals the sales price for the electricity generated, McIlvaine said.

Nationwide, as many as 90 new coal-fired plants are being considered with a combined capacity of 50,000 megawatts, McIlvaine said. That equals about 7 percent of the total power generation available in the United States and carries a price tag of about $75 billion.

One megawatt supplies the amount of electricity used by 400 to 900 homes in one year.

In Colorado, Xcel Energy is planning a 750-megawatt coal-fired plant near Pueblo, Colo., for $1.3 billion, while a comparable gas-fired plant would cost about $533 million. Xcel had seen a 13

percent increase in per capita demand for electricity in the last decade, thanks to a proliferation of household appliances from big screen televisions to cell phone chargers, Roalstad said.

Over the next 10 years, the United States will need about 140,000 megawatts of increased power, with about one-half or more to come from coal plants, McIlvaine said.

Jim Owen, a spokesman for Edison Electric Institute, an industry trade organization, said it is too soon to tell how big the coal-fired boom will be, given that less than half of planned plants are usually built.

The downside for coal-fired plants is that they are a major source of carbon dioxide emissions, the leading cause of global warming. Coal plants also emit sulfur dioxide, which creates acid rain; nitrogen oxide, which turns to ozone creating smog; and mercury, a neurotoxin especially dangerous to children.

Neither carbon dioxide nor mercury are currently regulated for coal-fired plants by the EPA, but proposed mercury rules are expected by the end of the year.

The technology for dealing with both types of emissions is just emerging. "I have not heard of any really viable carbon control technologies," Roalstad said.

Meanwhile, the EPA is debuting a regional air pollution plan intended to improve visibility in 16 national parks and wilderness areas, including the Grand Canyon National Park in Arizona.

Environmentalists believe the EPA's actions are another reason utilities are turning to coal plants now. "The theory is the industry sees carbon and mercury regulations coming and they have to get in their last push to get permits, because once those kick in, coal-fired electricity could cost more than wind," said Matt Lewis of Resource Media in San Francisco.

Xcel's new plant in Pueblo will meet all current emission requirements, as will any other plants the company builds in the future, Roalstad said.

"Legislators and regulators can certainly draft legislation to accomplish what they want to accomplish," Roalstad said. "We will comply with all regulatory requirements. We have no choice."

In the West, coal-fired power plants are in the works in Arizona, Colorado, Montana, New Mexico, Utah and Wyoming. The biggest plant being contemplated is a 1,500-megawatt station on Navajo land in the Four Corners region.

Wednesday March 30, 2004

Gasoline and diesel prices remain high as OPEC meets to discuss possible production cuts for later this spring.

Fig. 1: WA State Gasoline and Diesel Prices: Jan. 03 - Mar. 04